MSI40
Science, Technology and Innovation for Sustainable Healthcare
The International Federation of Medical Students’ Associations (IFMSA) is a non-profit, non-governmental organization representing associations of medical students worldwide. IFMSA was founded in 1951 and currently maintains 133 National Member Organizations from 123 countries across six continents, representing a network of 1.3 million medical students.

IFMSA envisions a world in which medical students unite for global health and are equipped with the knowledge, skills and values to take on health leadership roles locally and globally, so to shape a sustainable and healthy future.

IFMSA is recognized as a nongovernmental organization within the United Nations’ system and the World Health Organization; and works in collaboration with the World Medical Association.

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Dear reader,

I am thrilled to present to you the 40th issue of the Medical Students International. It is my second and last time addressing you as the Editor-in-Chief and as the Vice-President for Public Relations and Communication, and what a year it has been! Many advances were made in the field of Visibility and Promotion, and as we improve the quality of the work done, still there is a lot more to come and more exciting challenges to overcome.

For the development of this special issue, a group of dedicated people worked hard to make it happen, ensuring the quality of the content and the design of our beloved publication. I would like to personally thank Stella Triantafyllidou, Audrey Chung and Michelle Quaye for their work as Content Editors, and Akshay Raut, Simo Gaabouri, and Victor Leal Garcia, for their contribution as Content Designers. Without this group of people, the MSI 40 would not have come to be.

Now, the most important: the content. What is special about this issue is that we are celebrating 40 editions of MSI, developed throughout 25 years. This issue of the MSI reflects the advancements of the present and the excitement towards the future, as science and technology evolves to improve health worldwide. But most importantly, it reflects the work developed by medical students across the world. From awareness campaigns to exchanges opportunities, we showcase the work we do everyday to tackle the problems we see around us. It’s Youth who makes the change

Enjoy the reading!

Kind regards,
José Chen
Executive Board’s Message

Dear Reader,

It’s our great pleasure to address you one last time as Executive Board 2018-19 to introduce to you the 40th edition of the Medical Students International, IFMSA’s official magazine, which will take you through a remarkable journey, showcasing amazing achievements and explore the creative minds of innovative and advocate medical students from across the world.

Throughout this publication, you’ll get into inspiring stories of our members, productive and life changing projects, and outstanding ideas and solutions for current Global Health issues, written by medical students from IFMSA National Member Organizations.

We are proud to continue witnessing the contributions of medical students to global health agendas, and their eagerness to share their thoughts and make their voices heard. It proves to us that the vision of our organization is indeed achieved.

We can not forget to thank the hardworking team who brought all these voices and efforts together, and made this publication a reality. In addition to all of our devoted members for their articles submission. We hope you will enjoy reading this commemorative edition, and get inspired by the emerging ideas and voices of medical students worldwide.

Warmest Regards,

The IFMSA Executive Board
Ahmed, Batool, Fabrizzio, Georg, José, Nebojša and Majko
Science, Technology and Innovation for Sustainable Healthcare

Theme Event
The importance of technology in human life is undeniable, since it gives us access to information instantly, the internet, social media, laboratory devices, among many other activities that surround daily life. Technology permeates all social and economic spheres which allows us to say that human beings today are dependent on technology. In the book “Sapiens: A Brief History of Mankind,” the author Yuval Noah Harari shows the perfection of technology throughout the ages of humanity which allows the observation of their influence in society. Through technological evolution, primitive man became a better hunter and collector, changed his social patterns and daily habits opening a horizon of possibilities for the evolution of man [1].

As mentioned, technology influences all social settings, and this is no different in medicine. Yuval Harari is also the author of the book Homo Deus. From this book we can correlate technology with medicine. The technological advance allowed the fight against bacteria, opened lines of research such as genetic engineering, regenerative medicine and nanotechnology. However, in addition to the benefits of this advancement, it has also created an important problem regarding the patient-physician relationship which was built over the years[2].

The relationship between doctor and patient has been building since antiquity. In Ancient Egypt it was understood as a priestly relationship shrouded by magic and mysticism [3]. Over the years, the Greeks developed the Hippocratic oath by establishing a code of medical ethics that should be followed. After the French Revolution, the Biomedical model permeated hospitals with a somewhat paternalistic attitude, understanding the relationship between the physician and the patient as an active-passive action [4]. Over time, it has been observed that a good doctor-patient relationship, based on knowledge, loyalty and respect, helps the physician to gain the confidence of the patient [5,6].

The dynamics between physicians and patients varies with the different challenges they face [7]. Different experiences may interfere in the relationship between doctors and patients, and good communication is essential to create a link and consequent treatment efficacy [8,9].

The trust between physicians and patient

Building a good relationship, according to the book “Homo Deus”, raises questions about the medical career and the threat of being outdone by technology. Harari says that future doctors with ambitions for family medicine should rethink about it, since machines, robots, artificial intelligence, logarithms, databases can do the investigative part of physician’s job quicker and more efficiently [10].

The technology and its advancements are presented to medical students from the earliest years of college. In congresses, the technological aspect of Medicine also comes to be emphasized, while issues related to a more humanized relationship with the patient are less addressed. As a result, balance between these two aspects is not ensured. In order to maintain the balance between scientific advances and the humanistic aspects, there is a need for further progress on humanization issues to accompany technological advances. As long as there is little to no prioritization of humanistic issues in medical training, professionals will be mostly trained only to deal with technology.

Hence, the doctor-patient relationship is lost, there is no longer a bonding, because the technological advances make the relationship
colder since the technology does not take into account the physical and mental health care in a complementary way. According to the writings of Sir Theodore Fox, the patient is not sure with an artificially trained doctor, since knowing the person who has the disease is more important than just knowing the illness that has that person. This demonstrates how the patient should be treated, not only as a logarithm, but as a person with their unique characteristics [10,11].

Moreover, according to the doctor Caprara, Franco and Silva, the model referred to as “informative” would be used in the patient-physician relationship in the context of advanced technology. This concept says that the doctor no longer makes any decision about the patient, being only responsible for the transfer of information, just like a machine. Thus, the “communication” model, in which there is bilateral communication between the patient and the physician, in order to provide a division of responsibilities between both parties and a greater use of the consultation, would not happen. [12]

The pursuit of innovations at any cost has a corrosive power because new discoveries occur in such high rates that the time for ethical reflection is limited. [13]. That, combined with the hope for a new cure and better techniques leads to an easier acceptance of technological advances relevant to health. This, however, generates difficulties in the doctor’s relationship with the patient because ethical issues are left in the background in relation to the technological advances that may impair this relationship.

In this technological medicine, where do we find the doctor-patient relationship?

Medicine based on the creation of a bond ends up being weakened in the presence of the opportunities that technology provides. In Harari’s book, “Homo Deus”, is exposed a case where Medicine is lost of its component of humanization. This case is possible to be observed when a patient arrives with some complaint to the doctor, he does the anamnesis and physical examination, when nothing seems to be altered, the professional requests various exams [2]. This is the ideal way of practicing medicine, as approached in the book, the exams are used as a way to skip steps, such as a complete anamnesis, comprehensive look at the patient and listen, and seek direct something changed in the easiest way [2]. What many do not understand, is that the patient may be going through situations that will not appear in exams, such as problems at home or at work that reflect on his health or even psychological disturbances that will not be pointed out in laboratory tests, but that could be discovered during bonding between the doctor and patient [2].

In hospital contexts, we do not have the creation of the bond, but rather, we follow protocols. This link is essential for the development of good care. Within a hospital there is a routine, where the patient arrives, passes through a nursing screening, is annotated and transmitted to the attending physician, and had a brief conversation with them. Then, based on the results of the exams, which have already been performed by the nurses, the doctor makes the diagnosis or asks for new tests, in order to continue with the investigation. Harari, through his book, makes us question the role of health professionals, since actions are based on regulations, the research process becomes an algorithm of a larger system [2].

To sum up, technological advances are making it difficult to create a link with the patient, since the doctor, to a great extent, transfers information that is generated by machines. Also, the sole usage of machines is not enough, since it is necessary to know the patient in order to perform a better treatment [10]. For this reason, one should analyze the role of the doctor in relation to technology, the medical performance should not be reduced to only presenting the problems, collecting information, requesting examinations and making referrals. The doctor notes that each person is unique and with a different history from the others. Therefore, it is necessary to reflect on the limits of the technological advances that interfere in the patient-physician relationship.

References
New paradigms are scaring - or at least challenging - to most people, who often create an obstinate opposition to them. Socrates, when introducing a rational path as an option to the religious and dominant mindset, paid with his life. Jules Verne, who dreamed about submarines and moon travelling, was called delusional, with the world believing that his stories wouldn’t ever become reality. New technologies, being these, papirus, electricity or internet, create an urge for adaptation to a new and defying reality. It’s not different for educational innovations when technology usage comes to the spotlight. Modern learners have immediate, unlimited access to a wide variety of online resources, as digital textbooks, open-access journals, podcasts and TED talks (1). These provide fast and flexible usage of information throughout the globe with simple touch screening, differently from the traditional and not rarely dull means of learning (printed textbooks and encyclopedias). In a moment when Problem-Based Learning (PBL) has taken off as the promising philosophy and pedagogical approach for the health sciences (2), it doesn’t seem unreal to think that the new media will finally find its grounds on Medical Education. Such innovations draw on the potential of new technologies to provide a rich learning context with access to well-structured information and new spaces for knowledge collaboration. However, although the field is growing and a few reviews have focused on e-learning innovation in health sciences education, to date there is no existing systematic review of empirical studies on the usage of educational technologies applied to PBL in health sciences education (3).

E-learning, which is defined as learning and teaching online through network technologies, is arguably one of the most powerful responses to the growing need for education. These resources can be used either synchronously or asynchronously, whether learners and instructors find themselves in a real time communication or not. As far as the PBL approach is concerned, synchronous and blended learning reveals great advantages regarding the student’s active participation and appears to be more convenient in many Medical Education systems. But, this method has a major drawback, it lacks of predictable broadband in developing countries, forcing exclusive asynchronous mode to avoid limited internet access and provide flexible media usage (3).
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A meta-analysis showed that blended learning was more efficient than exclusively presencial or long-distance learning, supported by another study proving that generation Y learns faster when using web than with printed materials. However, the transition from traditional educational methods to these new technologies can be difficult for teachers who were raised in a world before internet and smartphones went mainstream, often finding these devices and softwares hard to use, or even doubting their efficacy, claiming that these devices work as a distractor rather than a tool at classroom. Even with evidence showing the positive impact of technology on medical education, it’s important to emphasize that e-learning by itself isn’t an academic quality indicator.

Regarding the use of social media, we find that its use is quite frequent, once 97.3% of the medical students interviewed use them, a trend found in another studies. The significant social media reach can be useful to learning, as seen at a experience at IFMSA Brazil, who frequently promotes relevant debates through WhatsApp, providing a virtual platform where students from all over the country can share information and ideas. Besides that, the increasing number of Instagram and Facebook pages debating medicine related issues show how the educational use of social media is growing worldwide.

In this Context, other meaningful examples that were given by IFMSA Brazil’s organization, mainly in the approach of Medical Education subjects - such as: Social Accountability, Increase of medical faculties, and challenges for the future - is the use of tools such as above mentioned WhatsApp debates, Go To Meeting in work reunions, Doodle as organization for strategic planning and many other apps and sites that help and organize the workflow of a continental size NMO. Therefore, the use of technologies still increases the sustainable development in National and Regional Meetings, by using websites and apps to reduce the use of papers and inciting the work of dynamic presentations, diminishing the use of tools and printed material to reach this important and necessary goal.

The shortage of trained health workers is currently critical in developing countries, which are facing the largest burden of disease at the global scenario. Having this in mind, it’s worth remembering that the sustainable development goals bring as a challenge the training of healthcare professionals in underdeveloped areas, what makes information technology a promising bet on unique and cost-effective opportunities to expand access to training through e-learning.

Furthermore, for public brazilian universities and other ones with low resources - especially in developing countries - technology can be useful to achieve financial sustainability and great outcomes in academic learning. For example, e-books and other online materials don’t seem to wear out nowadays, neither are restrict to a certain number of usages. As many universities suffer with lack of teachers, mainly from specific areas such as pediatric surgery, blended learning method can help to deal with this issue with an appealing low-budget strategy, specially for countryside schools. Moreover, it promises to build up a new green-minded approach in Medical Education systems.

Choosing e-materials instead of physical papers not only helps to reduce financial costs, but also environmental impact by addressing a simple sustainability concept, the 3 R’s: reduce, reuse and recycle. E-materials reduce paper waste, which is frequently high. Also, they have a potential to be endlessly reused and may be updated afterwards. In the medical field, where new drugs, protocols and evidence appear everyday, the possibility to update a material without having to discard paper is fundamental to reduce the amount of trash generated.

A sustainable future inevitably paints a new perspective on how to develop and practice an engaging and green-minded Medical Education. As shown by many remarkable examples in history, changes don’t usually come without fear and resistance to the traditional paradigms, although constantly open the horizons of the society to promising opportunities and need for
a worldwide environmental consciousness. It really seems that these aspects find in the current generation the fertile grounds and tools to make our words succeed: think global, act local.

References

**Universal Medical Profile System: A Technological Reform in Sustainable Healthcare**

Purva Shah, Poojan Thakkar
MSAI India

In the era of diminishing resources and escalating population, sustainable technology becomes the norm of the day. Sustainable health has been aptly described by the Alliance for Natural Health as “A complex system of interacting approaches to the restoration, management and optimization of human health that have an ecological base, that are environmentally, economically and socially viable indefinitely, that work harmoniously both with the human body and the non-human environment, and which do not result in unfair or disproportionate impacts on any significant contributory element of the healthcare system.”[1] We have come a long way from the industrial revolution to the present day, the age of the digital revolution where our lives revolve around electronics. From ordering medicines online and getting in touch with a physician via video call to measuring our vitals, calculating our calories burnt to even measuring ECG from wearables, modern gadgets and gizmos have it all! In this article, we would like to present a technological reform with the potential to revolutionize medicine, research, and
E-learning, which is defined as learning and teaching online through network technologies, is arguably one of the most powerful responses to the growing need for education. This resource can be used either synchronously or asynchronously, whether learners and instructors find themselves in a real-time communication or not. As far as the PBL approach is concerned, synchronous and blended learning reveals great advantages regarding the student's active participation and appears to be more convenient in many Medical Education systems. But, this method has a major drawback; it lacks of predictable broadband in developing countries, forcing exclusive asynchronous mode to avoid limited internet access and provide flexible media usage (3).

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Public health programs, especially in developing countries like India. Technology that will help to focus on maintaining the health of those that are healthy while still caring for those suffering, thereby decreasing the burden of illness by both active preventive and curative approaches. A system that will enable the patients to be more informed, aware, and more importantly, be the owner of their own health.

Developing countries usually have numerous factors that negatively impact health; such as high pollution, unsafe water supply, low literacy rates disease awareness levels, high incidence of infectious diseases, inadequate family planning programs, and high corruption levels. Their healthcare system is under a continuous metamorphosis in their attempt to adapt to the changing trends of diseases and population demographics. With a meager portion of the GDP dedicated to health expenditure [2], these countries are in a dire need for sustainable technological reforms keeping in mind the available resources, population size, and disease distribution. In India, the healthcare system is run at the grassroots level primarily by educated, semi-professional, local workers whose main functions are to maintain a register for their respective locality, periodically screen the community for common diseases, help the rapid response team in curbing epidemics and outbreaks, provide primary health care to everyone along with basic maternal and child care services. The gathered information is stored in registers kept at primary health centers and government hospitals while electronic data storage is used only in a few aspects of the healthcare system such as Maternal and Child Health. There is a large-scale loss to follow-up for these screening tests due to migration, ignorance, and unawareness in the community. Many registers are destroyed by rains, rodents, and improper handling while others get lost in huge piles of paperwork. Duplicate entries are common due to the constant migration of people for work, vacation, and maternity. Some ICT-based (Information, Communication, and Technology) initiatives by the government like Nikshay and DOTS-99 (Directly Observed Treatment Short course) for Tuberculosis [3] and Kilkari for postnatal care [4] are major stepping stones towards a digitized healthcare system in India. In public and private tertiary care hospitals, an individualized risk-based passive screening process goes on instead of the active one conducted by the aforementioned community grassroots workers. In hospitals, most information about the medical care delivered to patients is stored in case files and left under the responsibility of the patients themselves. Financially strong hospitals with a high footfall of patients keep their own central electronic data sheet to store patient information. In the absence of a common portal to pool in data from all hospitals, if a patient seeks transfers to another hospital, the medical history and investigations need to be repeated. This puts a lot of strain on the hospital in terms of time and money while ultimately affecting the country’s economy.

Universal Medical Profile System (UMPS), a digital information storing system that will create a profile for patients all over the country with unique identification numbers and link them to the numbers of their respective family members, thereby creating a digital record encompassing the medical history of the entire pedigree. As a result, we can easily screen for genetic diseases and provide genetic counselling services in a timely manner. Such a profile will contain information of the patient right from the birth to the very last breath. The range of data may include but not be limited to the following headings: birth history, demographic data, immunization status, developmental milestones, past medical history in terms of OPD (Out Patient Department) visits and hospital admissions, laboratory results and imaging studies, current...
and past medication details, allergies, addiction, and billing information. Government and Private hospitals can collaborate to make this technology a reality and a one-of-its-kind reform in the field of medicine. Such a system will involve data collection by a number of medical as well as non-medical personnel, beginning from the obstetrician providing birth care, class teacher and sports teachers for physical development and mental health of the child throughout schooling, visits to the pediatrician for medical problems in childhood, to doctors involved in care of the patient during consequent visits to the hospital later in patient’s life. Various studies reveal that health status in childhood greatly affects the diseases suffered in later life. [5, 6] The advantages of such technology are exhaustive:

- This magnanimous repertoire of data from all over the country will provide the geographical distribution of maladies while also showing the changes in the natural history of diseases. This will aid in budgeting and efficient allocation of resources to community outreach programs in combating the prevalent illnesses.
- It will provide organized data for retrospective research with a greater sample size and heterogeneity of data. With its help, researchers can easily find people who meet the inclusion criteria.
- Such a system provides more accessibility and portability of patient information while promoting transparency in terms of medical fees and medicine brands used.
- It promotes standardization of terminology in terms of abbreviations and also provides a means for regular updates.
- These records can be easily transferred to other hospitals in case the patient seeks a transfer or requires specialized care.
- In contrast to the traditional records, the digital records do not get timeworn and the chances of data being lost or destroyed are comparatively minimal.
- Even today, in many remote pockets of developing nations, there are culturally and economically backward communities, where the vicious cycle of illiteracy, unemployment, and disease prevails. The need of the hour in these regions is an active outreach program which not only deals with infectious diseases but also common non-communicable ailments like diabetes, hypertension, breast cancer, and cervical cancer. The UMPS will provide details about the risk factors and positive family history for such conditions.
- Furthermore, this digitized approach of data entry and storage is environment friendly as it drastically reduces the utilization of paper.
- All in all, this system will result in a smoother process of patient care and ultimately help in improving the health status of the nation.

Like most other things, this system too has its fair share of shortcomings. Breach of privacy is perhaps the most important of all, but it can be overcome with technological advancements in data security, and an OTP or finger-print based system to retrieve sensitive information.

Appropriate quality control at the level of data entry can be a problem which can be overcome with training of manpower and periodic surprise inspections.

With proper planning and implementation, the UMPS will have a broad spectrum of positive manifestations in disease alleviation and health promotion. This way, from politics to business to medical care, everyone becomes an integral part of inculcating innovative technological measures for the sustainable development of healthcare in the society. Some countries like the United States of America, Canada and Finland have already embarked on their journey on this wondrous path of centralized health information with pragmatic and positive results. With a little assistance from international organizations like the United Nations (UN), World Health Organization (WHO), International Monetary Fund (IMF), and the World Bank along with a nudge by the countries with an established UMPS, the developing countries will be able to overcome all hurdles and create their own Universal Medical Profile System.

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Modern day technology is developing in an exponential speed with new discoveries and advancements making an entrance in our daily life. As health is an integral part of both our individual well-being and the productivity of societies, it’s no surprise that medical research is an area of focus with many health challenges and diseases yet to be tackled. The aim of achieving Universal Health Coverage is another reason why innovation and research in the medical field represent a fundamental need, to ensure the availability, accessibility and quality of all components of the healthcare system, and as such fulfilling the right to health of all individuals impartially and without any discrimination.

In the quest of fulfilling the right to health, following a people-centered approach in managing the healthcare system is essential to ensure the best possible use of resources while also maintaining and improving the health of populations efficiently. Applying a rights-based approach provides the basis to put people's needs at the center of focus. A rights-based approach to health ensures that the core components and standards of the right to health are implemented in accordance with the human rights principles of non-discrimination, participation and accountability.[1,2] It entails empowering patients (as rights holders) to make informed decisions when it comes to their health and participate with their healthcare professionals in setting the follow-up plans and in establishing the necessary lifestyle changes. It also means increasing the ability and accountability of individuals and institutions in the healthcare system (as duty bearers) to protect and fulfill the right to health. As such, to ensure proper empowerment of patients, and that the service providers are held accountable for their actions, continuous learning, research and innovation are essential. But how do we ensure that these processes follow a rights-based approach and provides sustainable outcomes?

An ethical approach is essential to lead and guide research and innovation in the medical field to have an sustainable outcome. Since there is an important difference between clinical practice and clinical research, the two scenarios require a distinctive set of ethical principles. In clinical practice, the primary aim of the physician is to help their patient, improve their health and well-being or lengthen their life. However, in medical research the primary objective is not the individual health of a patient, but rather to generate new knowledge to improve general health and/or increase understanding of human biology. When a study involves human subjects, such as clinical research studies do, this can become problematic: although a subject might indirectly benefit from the study results, the researcher is primarily focussed on the objectives of the study itself, degrading the patient to a mere mean, rather than a main interest.[4]
For this reason, clinical research requires a distinct set of ethical principles to protect the interests and rights of the subjects involved.

There are many international codes and guidelines that try to capture these requirements, however, many of these were written in response to specific events or scandals and tend to emphasize on specific ethical requirements rather than providing an holistic approach to ethical clinical research. By analyzing these codes, around seven different requirements can be distinguished for a study involving human subjects to be ethical [3].

The first of these requirements is ensuring the value of the research, meaning that it should lead to enhancements of health or knowledge; a study is not valuable when for example, when results are never shared or when it tests an intervention that could never be practically be implemented even if effective. The scientific validity of the study is also a requirement: the study must be conducted in a methodologically rigorous manner, for as if a research is conducted poorly, results will be scientifically unreliable or invalid, and thus of no value. Another requirement is that of fair subject selection, which requires that the scientific goals of the study, and no factors unrelated to the purposes of the research, such as vulnerability or privilege, determine the groups and individuals that are recruited and enrolled. It also entails that those who bear the burdens and risks of the research (i.e. the study subjects) should be in a position to enjoy it’s benefits, and those who benefit, should share some of the risks and burdens. In addition, it is also required to ensure a favorable risk-benefit ratio, meaning that overall, the potential benefits to individual subjects and society outweigh or be proportionate to the risks. Also, since researchers inherently have multiple, legitimate interests, which can generate conflicts or distort their judgement, a research is required to be independently reviewed by individuals unaffiliated with the clinical research, to minimize the potential impacts of any conflict of interests. Of course, informed consent is also required, to ensure that participants are well-informed about the purpose, procedures and potential risks and benefits of the research and provide their voluntary consent to participate in the research. Furthermore, potential and enrolled subjects must be treated with respect from the time they are approached, throughout and even after the study ends. Amongst others, this means that subjects should have their privacy protected, be permitted to withdraw from the study at any time, be informed of newly discovered risks or benefits, have their well-being monitored and should have access to the study results afterwards. Although these seven requirements provide quite an holistic and universal approach to research ethics, they are dependent on context and culture and have to be balanced and adjusted according to the given circumstances.[3]

But as clinical research represents only one means of developing the healthcare services what are the other approaches to innovation and what ethical concerns do they convey? Innovative practice is one of these approaches, in which a clinician provides something new, untested or nonstandard to a patient in clinical care, rather than in the course of a research study [4]. Many reasons drive this approach: the intervention might be too underdeveloped or risky for a study to gain approval from institutional review boards; there might be insufficient technical or financial resources; the patient might not meet the inclusion criteria of a study; or enrollment to the study might impose significant non-medical burdens on the patient among others. Yet, innovative practice entails many ethical concerns, such as significant uncertainty about the possible harms and benefits, compromising the clinicians’ duty of beneficence. These uncertainties make it harder to gain full informed consent from patients, undermining their autonomy or conveying false expectations. Another concern is raised when a clinician has conflicting interests in an intervention’s success, influencing their judgement about its safety and effectiveness which can also create a pathway for harmful or non-beneficial interventions to spread within medical practice without being subjected to rigorous scientific evaluation. This can pose risks on a wider community of patients or whole society or lead to engagement or investments in the intervention, while it’s true effectiveness has not been proven yet. However, once an intervention is widely accepted within the medical community, scientifically assessing its true risks and benefits will arise new practical and ethical concerns. Although some argue that these concerns justify the use of innovative clinical interventions only in the context of clinical research, others propose a permissive oversight approach, which allows innovative practice under some restrictions that manage the ethical concerns it raises [4]. For example, reviewing if engaging in innovative
practice rather than clinical research can be justified is one of the approaches that are thought to help to ethically and effectively use innovative practice to improve and advance our health care [4].

Research and innovative practice are different approaches to improve healthcare services and ensure their sustainability. Each one of them involve certain ethical concerns which can be tackled in different ways. In the ethical framework of each of these approaches, a clear distinction is made between research and clinical practice. However, there are also arguments that the two should be integrated, instead of separated, acting in a complementary manner to each other and thus ensuring continuous flow of information and learning.[5] As we think that a continuous learning process within the healthcare system is needed to ensure the fulfillment of the right to health, we consider this integration of research and practice a possible aim for the future of medicine, which might be able to ensure both innovation and sustainability. Yet we think it would require a thorough reconsideration of the current ethical frameworks we use for clinical and research ethics. Since these rely and a clear distinction of clinical practice and research, the integrating of the two would also require an integration of their ethics.

Resources:

The recurrent technological rise in the last decades has introduced the application of new technologies in the daily lives of individuals and has been growing remarkably in means of service as the medical area. Among them are technologies related to communication linked to the idea of productivity and speed. In this bias, arises the development of telemedicine, together with the strengthening of easy-to-access media, which has transformed the way and speed at which valid diagnostic information is forwarded, processed and used. Thus, this digitization of medical practice produces a greater exchange and reach of information, which can consequently improve the health of people and communities. Moreover, by using online means of information and quick access to avoid stressful situations, overcrowding in public health services as well as facilitating access by reducing national problems of deficient transport and the environmental damage that these transports generate to the environment as pollution.

In Brazil, a country of a large territorial dimension, telemedicine opportunizes the unification and qualification of primary care, acting from tele-education to tele-assistance. In this system, we have the realization of tele-consultation that, in addition to being dynamic, can offer more than
one medical opinion, solve diagnostic doubts and propose therapeutic conducts, which provides a better resolution of cases and a more complete patient care. That is, even in cases in which the distance is a critical factor, especially when it comes to the presence of specialist physicians in the peripheries, this tool allows the access to a good health service to all. Several medical specialties can be contemplated by this method of computerization of care, such as: Dermatology, psychiatry, cardiology, emergency, pathology, trauma and radiology.

Dermatology, for its essentially visual specialty, allows the digital transmission of images of the skin lesions of patients in real time through videoconferences, emails or other storage systems. A prominent example of the use of telemedicine occurred in the research carried out by the Telederma project of the dermatology service of the HCPA (Porto Alegre Clinical Hospital), in which remote clinical consultations were conducted using the storage system and sending information, with this tool the diagnostic hit rate was 91.5%, in counter-departure the in-person consultations, which had a correct rate of 95.8%, that is, a small difference considering the advantages of the use of telemedicine in Service. Another project adopted in Brazil was the national Telessaúde Brazil Networks program, instituted by the Ministry of Health, which is present in 23 brazilian states, with 8,097 points of contact and serves 3,417 cities. In this practice, we implanted distance echocardiography services, telediagnostic of chronic respiratory diseases, radiological examinations of scanned thorax and sent for evaluation of teleconsultants radiologists. Telemedicine, according to the World Health Organization, is the offer of medicine in a short period of time, so such technology slows down areas where time is important as the emergency room and the intensive care unit. Telemedicine is a tool that enables a way of optimization of the medical service, which can act a control center that can send information to assist geographically distant health services, mediating a care and even some procedures in an appropriate way. The Israelita Albert Einstein Hospital created a real-time support system in this area, optimizing patient care and prognosis.

According to a referenced article, the treatment by means of teleconference allows for a real-time evaluation by highly skilled professionals, who collects the routine data passed to the analysis which boards: demographic data of patients, origin of referral, details of the main complaint and diagnosis, examinations performed, processing speeds and administered treatments. There were also more specific data collected for each case during teleconsultations including the patient's ID, names and categories of the professionals involved, main complaint, date and time, type of consultation and image exams discussed, reason of the medical search, time spent, resources used, nature and impact of any technical problem, diagnosis and referral or guidance. The use of telemedicine was included in the decision support algorithms in the main emergencies: trauma (especially cranial trauma), sepsis, stroke and myocardial infarction with ST-segment elevation.

Moreover, the sending of this digitized information, in addition to optimizing time and accessibility, avoids expenses with printing of reports and exams preventing environmental depredation. Beyond saving on this, we avert the expense of the transportation between professionals to hospitals that require their services. By reducing such use of transport, in addition to increasing the quality of life of the professional who does not need to spend hours in congestion of large urban centers, it also reduces the emission of pollutant gases benefiting, consequently, the health of society in general.

Today, the challenge that surrounds telemedicine is its regulatory action, mainly due to its ethical and legal aspects, because it raises the respect for confidentiality, confidentiality and privacy of information. Currently, the legislation is restricted, and the use of telemedicine carries great responsibility to the physician. Allied to this, a conservative culture, work process, power structures, professional relationships and uncertainties generate significant resistance to change. From a technical point of view, there is still a lack of standardization and interoperability as requirements for the full diffusion of telemedicine. Another component that hinders the full adherence of telemedicine is the extremely unequal regional distribution in terms of infrastructure, mainly broadband internet. However, all supracited difficulties can be mitigated as this technology is established as well as adherence by health professionals is naturalized.

Therefore, we can conclude that telemedicine is an innovative practice that has been rooted in brazilian medical practice. As much as it is growing and settling in this new era, it has already shown
numerous benefits regarding the sustainability, speed and agility of diagnoses, besides providing support from leading professionals to regions of Brazil in which health is deficient. These benefits added to the effective results of correct diagnoses are indicators that telemedicine is an area of brazilian health that deserves appreciation and investments.

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Development of improved and sustainable healthcare network to medically underserved areas through telemedicine

The technology, in the last decades, has been developing of accelerated way by the world. And this new world will be largely shaped by digital convergence, resulting from the fusion of Information Technologies, telecommunications and multimedia. Such technological advances have directly impacted the health sphere, since assistance gains new modalities of care, allowing, thus, the construction of a health care more resolutive and efficient [1].

In fact, telemedicine emerges as an information technology resource whose goal is to expand health care by enabling medical practice, especially in areas where distance is critical. The World Health Organization also adds that this resource is not limited only to diagnosis, prevention and treatment of diseases, but represents a useful tool for continuing education to service providers, as well as subsidizing the formulation of health research [2].

Its emergence is in the late twentieth century, and although it is on a steady rise, its applicability in developing countries still faces challenges of a technical, regulatory, ethical and cultural nature. In Brazil, currently, the federal and state governments, recognizing the potential for expansion in the country, have been dedicating countless efforts to that telemedicine reaches its maximum potential. It is worth mentioning the great territorial extension of the country, thus the existence of numerous places of difficult access, coupled with an unequal distribution of quality medical resources, which impairs the realization of the universal, integral and equitable health right [3].

From this perspective, congenital heart diseases, for example, represent one of the highest rates of morbidity and mortality in the neonatal period, affecting 8-10 per 1000 live births [4]. Therefore, the diagnosis and the early establishment of effective therapeutic measures are essential for the prevention of adverse effects and outcomes. Knowing this, the Health State Department of Paraíba, on October 2011, carried
out the development of a network of services in pediatric cardiology, whose main objective was to execute the diagnosis of cardiac patients in regions of Paraíba with difficult access to health, through a screening program based on physical examination of the cardiovascular, pulse oximetry and screening echocardiography. Currently, by incorporating other lines of care, the project adopted the designation of Network Care. Now, besides children with heart disease, children with microcephaly and women with high-risk pregnancies are assisted through virtual ambulatory rooms, traveling caravans and primary care units. Its implementation is centered on the use of telemedicine with accessible technology, which enables specialized medical attention to patients by health professionals who are in distant locations.

The Heart Rooms conducts, weekly, supervised virtual clinics, in order to avoid patients having to travel for long distances to access specialized care. In the first quarter of 2019, 220 patients were assisted in the 11 rooms distributed by the state. In addition, each year, the Network Care caravan, another strategy developed by the Rede, travels 13 cities of Paraíba to conduct, in a course of two thousand kilometers, examinations and visits for children with cardiopathy and microcephaly and pregnant women with high pregnancy risk. The initiative has existed since 2011 and, at the end of the 2018 edition, 6,741 patients were already provided care, of which 3,000 children with heart diseases and 330 professionals were involved. Besides the visits, the caravan promoted the training of 2,418 local health professionals.

The Care Network is composed of a specialized regional center, two specialized complexes and 20 maternity hospitals of level I (low complexity care) and level II (medium and high complexity care). Initially, it is the responsibility of the assistance teams of the maternity hospitals level I, the first pulse oximetry screening, performed after the first 24 after birth, and initial assistance to neonates and women in the pregnancy and puerperal period at risk. Secondly, in maternity hospitals level II, neonatologists perform a second screening through echocardiography, under direct online supervision or by uploading the ultrasound images into the system for later cardiological report, in patients with murmurs, children of diabetic mothers and in those who present cyanosis or that arterial pulse oximetry is altered, in order to rule out serious structural pathologies.

Through tele-echocardiography, it is possible, in a safe and cost-effective way, to perform the diagnosis and clinical management quickly and accurately, thus avoiding unnecessary transfers and late or incomplete diagnostic information [5]. Altering patients are referred, depending on the severity and profile of the referral service, to the Metropolitan Dom José Maria Pires Hospital or to the Arlinda Marques Pediatric Complex. The first one, having logistics of the local specialized complex, performs cardiac surgeries and specialized clinical treatment of children with high complexity heart diseases in the State. The second one is the headquarter of Network Care, with information technology support structure to perform network actions, and reference in the outpatient follow-up of children with congenital heart disease of low and medium complexity.

The Network also offers outpatient follow-up, in a third moment, with clinical pediatricians accompanying patients with heart diseases, assisted by the cardiologist through telemedicine. The collected data are stored in a database system and sent to the Statistics Department of the Federal University of Paraíba (UFPB), so that the subsequent analysis allows the production and optimization of protocols between the centers and subsidize the development of training activities and active search and identification of patients in situations of risk in the structural axes. Thus, as a conclusion of the above, it is clear that telemedicine, especially in developing countries, has the capacity to address health adversities, notably as a result of expanded access to specialized medical services by populations residing far from large urban centers. In addition, it allows optimization of the time spent to perform the proper diagnosis and management; improvement in the quality of health care; containment of costs and support for epidemiological surveillance. Its expansion to other specialties may present similar results [6].

References
Science, Technology and Sustainable Healthcare

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Robert Liston was a respected surgeon of the 18th century. In fact, he was the first surgeon to perform a surgery using modern anesthesia, and his skill was unmatched by many surgeons of his era. However, his relevance to this article is not embedded in his surgical prowess but in a bizarre surgical incident. In those times, surgical anesthesia was yet to be discovered and hence, the surgeon had to be quick in his surgery. In a surgery, Liston hurriedly severed the fingers of his assistant and observing the terrifying incident, a bystander died of shock. The patient and the assistant later died of infection and hence, Liston achieved a mortality rate of 300 percent in his surgery.

The aforementioned incident would have taken over the world by a storm today, but not a long while ago, such deaths were a norm. This drastic improvement in the concepts and standards of healthcare has been brought about by, among other factors, the widespread use of technology and scientific innovations in modern medicine. It is important to note that the upgradation of healthcare is not a mere result of better medicine, but also by virtue of advancements in Epidemiological methods, social sciences, paramedical sciences and other allied health sciences. Surgery as we know has never been more advanced; Surgery with Artificial Intelligence is in experimental phase, Medicine is exploring new horizons in the form of a crossover with nanotechnology, and psychology is integrating its approach with neurobiology, which were classically considered to diverge.

These advancements are a welcome addition to the array of defenses of humankind against disease and deformity. However, a word of caution is necessary. Sustainability of healthcare not only encompasses quality, affordable healthcare but also safety and effectiveness of medicine for future generations. Consider the curious case of antibiotics: The average life expectancy before the discovery of antibiotics was 47 years in industrialized countries (1). The discovery of antibiotics led the charge against communicable infections and the life expectancy at birth in the US rose to 78.8 years (1). However, rampant and extra judicious use of antibiotics led to the development of antibiotic resistance and the death rates of communicable diseases rose again, albeit not to the same zenith of the pre-antibiotic era. This is an example of a myopic approach towards the use of antibiotics and medicine in general. As it stands, antibiotic resistant microbial strains are emerging, termed “superbugs”, and they may represent a significant nuisance to healthcare in the future.

The mistakes of antibiotic saga must not be repeated in the future to ensure that scientific discoveries in medicine may also be sustainable in the long run. The lessons from this arena can be used to shape our policy towards newer advances in medical sciences, say Robotics and Artificial Intelligence (AI) in Surgery. Robots and Artificial intelligence are being involved in multiple procedures and functions in surgery.
Robotic-Assisted Laparoscopic Radical Prostatectomy (RALRP), for example, is considered superior to its conventional counterpart. Researchers have investigated the experience with RALRP in Canadian healthcare system and they found it to be beneficial for clinical application (2). However, they conducted a retrospective study and did not compare their data with the results of a standardized trial conducted for a Conventional Laparoscopic Radical Prostatectomy. A robot-inclusive system of healthcare would cost more, and may hamper the access of underprivileged segments of society to healthcare. Robotic technology at this time is in early stages and does not offer significant advantages as to entirely replace the conventional treatment as in RALRP procedure case (3). In addition, healthcare decision-making teams require a deep analysis of human systems and it is unclear if the data integration systems of Robotics and AI are sophisticated enough to explore the depth of diagnostics, therapeutics or surgery. Put simply, there are no indicators as to how a Robot would react if a vessel bleeds during prostate surgery and was unlikely to do so. This example can be extrapolated to large scale use of Robotics in the future in a specialty like Geriatrics. We can envision a future nursing home run exclusively by Robots or paramedical staff replaced by Robots in hospital. Research has shown that present-day robotics may be susceptible to cyber-attacks as design of these systems does not prioritize cybersecurity (4). In case of a cyber-attack on such facilities, the results could prove catastrophic. These issues merit discussion since it is human life that is at stake.

Science and Technology has revolutionized human understanding in all dimensions, including healthcare systems. It stands without doubt that the healthcare system would become paralyzed with the withdrawal of technology at any stage. However, a judicious and cautious approach towards the use of technological advancements is necessary to ensure sustainability of global healthcare.

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C++ saves the day? Future of Artificial Intelligence in Healthcare Systems

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Medicine is progressing fast with cutting-edge disclosures being made every day. Large amounts of knowledge are being added to encyclopedias as new facts come to light as a result of research being done all over the world. Medicine endorses new innovative dimensions to help patients prosper with the latest approach which is safe and easy to adopt.

Man-made reasoning, or Artificial Intelligence (AI), is taking the world by storm. Klaus Schwab, the Founder of World Economic Forum, coined the term ‘Fourth Industrial Revolution’ (following the third industrial revolution which was the Digital Revolution) for the rapidly growing industry of Artificial Intelligence (AI) to explain its importance in shaping the future[1]. Today, from understanding human speech to competing with a human brain at the highest levels in strategic games (such as chess), AI is benefiting almost every person who owns a smartphone.
Artificial Intelligence (AI) is coming to medical services pretty quickly and has long lasting effects to aid human efforts toward tackling unprecedented complexities. Natural Intelligence is and will always remain unparalleled but Artificial Intelligence (AI) can aid and in some cases even replace the human judgment and clinical assessment.

With the advancements in healthcare technology, in coming years we could cure diseases much earlier than what we can do now. Although sickness will never be totally eliminated, using modern approaches in science, information, and innovation, we will almost certainly identify and distinguish it earlier, mediate it proactively, and better comprehend its movement to help people more efficiently and effectively toward their prosperity and well being.

There is an amazing blend of information and innovation developments in the health sector which is now getting attention and would empower the value-based healthcare for the uplift of living standards.

**Role of Artificial Intelligence**

‘Artificial intelligence’ is a term used in computer science to describe the ability of a computer to exhibit certain human cognitive functions such as learning, reasoning and problem solving. This is done by collection of the external data, its interpretation by comparing it with previously stored data and taking a decision to achieve specific goals and tasks on its own.

AI is changing the scene of healthcare and medical research. In many countries, ophthalmologists and Personal Computers (PC) researchers are cooperating to test a robotized picture arrangement framework to screen retinal photos of diabetic patients. Diabetic retinopathy (DR) influences more than 90 million individuals worldwide and is a main source of visual deficiency in adults. Fundoscopy is a powerful strategy to screen the degree of DR and AI can help distinguish patients who will benefit from medications[2].

In recent years, technology giants such as Microsoft, Google and IBM have announced projects which aim at incorporating AI in the healthcare system for better delivery of healthcare services. In 2014, Google acquired an AI research firm, DeepMind, which aims to build an AI-powered application which uses algorithms capable of predicting disease. Just like the Google Maps helps us in navigation, this AI-powered application could help clinicians to navigate through clinical pathways.

**Artificial Neural Networks**

Machine learning, considered as a subset of AI, is the ability of a system to learn and improve from experience and focuses on development of computer programs which can access data and use it to learn for itself. Artificial neural networks (ANN) are one of the main tools used in machine learning. As the name suggests, these are the networks inspired by biological neural networks which replicate the way we humans learn. Patterns of information in the form of datasets are being fed into the network via an input neuron and these in turn pass through several hidden layers to arrive at output neuron. ‘An artificial neuron’ is a mathematical function conceived as a model of biological neuron. [image]

Numerous cutting edge neural networks have in excess of 100 layers. Neural networks with numerous layers can show complex relations between the information and yield however may require more information, calculation time or propelled engineering structures in order to accomplish ideal execution. Numerous kinds of layers, scientific activities for the neurons, and regularization techniques have been structured.

From predicting a disease to organizational decision making for health care systems, artificial neural networks have vast applications in the field of health sciences [3].

An interesting application of the artificial neural networks is Natural language processing (NLP) which interprets human generated spoken words and written notes. The Information technology giant IBM has developed a supercomputer, IBM Watson, which combines Natural language processing (NLP) with powerful analytical tools. IBM Watson Health applied in the field of medical sciences which, simply put, interprets and annotates the clinical data and identifies problems in a patient’s medical records and also summarizes their history of care. It can also identify patients who are similar to other patients in a clinically meaningful way [4].

Present day neural networks can have several hundreds to millions of parameters and take gigantic measures of computational assets to prepare. Luckily, ongoing advances in PC processor configuration give the computational power required for deep learning.
ROLE of CRISPR Technology
There are many genetic disorders such as haemophilia, cystic fibrosis and sickle cell anemia which arise due to mutations in genes. For years scientists have tried to treat genetic disorders by editing the culprit genes. There has been enthusiasm around controlling the genome for a wide scope of uses in medical research. In the past couple years, scientists have created exactly this kind of gene-editing tool, which is known as CRISPR. Malignancy treatment is a standout amongst the most encouraging fields for CRISPR innovation [5].

Strikingly, a portion of the main most significant work finished with CRISPR is on the exploration side of malignant growth treatment. Researchers can utilize CRISPR to make a model that gives them a chance to comprehend the impacts of disease and how to treat it. Scientists are additionally exploring different avenues regarding CRISPR to make new immunotherapies to battle malignant growth. Utilizing CRISPR, researchers can hereditarily design T-cells to discover and kill malignancy-causing cells. Patients could be infused with these T-cells so as to fend off disease, like the way white blood cells may attack an infection.

Various players are taking a shot at this application. A genome altering organization Editas Medicine is building up a medication in association with disease therapeutics organization Juno Therapeutics.

As fascinating as the applications of these technologies sound, they come at a huge cost. For these technologies to play their role in advancement of health care delivery, governments ought to take some crucial steps such as passing bills in assemblies, proper allocation of budget in the Information Technology sector and digitalization of medical records [6]. While CRISPR may enable scientists to battle malignant growth, two late examinations recommend employments of CRISPR may cause disease as well. The investigations find that cells changed by CRISPR-Cas9 can trigger malignant growth when altered by closing down the tumor suppressing quality of p53.

In contrast to developed countries, some developing countries lack Electronic Medical Records (EMRs). These EMRs, if available, can be used by AI agents to compare the medical records of patients with those of healthy individuals. Such comparisons can not only predict the disease but can also evaluate the efficacy of the diagnostic techniques and treatment procedures used, keeping in mind their cost effectiveness.

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IFMSA Brazil

Fighting Homophobia and Transphobia in a country that sees an extreme right-wing wave of politics grow is not easy. Bringing human rights to our medical education still a difficult obstacle in Brazilian lands. Present in 153 Brazilian medical schools, with 153 active SCORA committees, IFMSA Brazil has historically positioned itself in favor of LGBTQI+ Health. In 2019, our NMO and our SCORA convened all our local committees to participate in a National Activity, involving the research, publication, capacity building, marketing, programs and activities. Our goal was to promote LGBTQI+ rights in medical education and health education. There were 40 local committees, from 32 Brazilian cities, in 18 Brazilian states, together for almost 3 months in this process, acting actively. There were 200 coordinators of local activities, reaching an audience of more than 5,000 medical students, trained to become local leaders in the fight for Health and LGBTQI+ Rights. We use information technology to reach all of these 200 coordinators: we have built five lessons presenting the history of LGBTQI+ rights and struggle, the LGBTQI+ health and rights situation in Brazil, we have conducted advocacy training on the LGBTQI+ staff, we talk about care and clinic for the patient LGBTQI+, and finally, we present the importance and how to work for the inclusion of the LGBTQI+ in the medical curriculum. Along with this process, we have developed an unprecedented Rainbow Light Memorial, inspired by the Candle Light Memorial: in 32 Brazilian cities, we remember with candles, with the flag of the rainbow, those killed by intolerance, homophobia, transphobia - telling their stories, their names, and how they were killed. We also built other methodologies: we organized symposiums and congresses in the cities, organized workshops to serve the LGBTQI+ population, organized seminars for the LGBTQI+ population + presented their work, met with the boards of colleges and hospitals looking for support and partnership to promote LGBTQI+ events at colleges and integrate them into the medical curriculum. We have crossed barriers in many colleges, we have faced many more successes. Just as it is in life. For the first time we have united in a group only 40 Brazilian colleges working at the same time for the promotion of rights and health LGBTQI+. We promote this by forging leaders. We live in a country that only on June 13, 2019 criminalized homophobia, and saw on June 14, 2019 its President say that this measure is problematic for the country. Medicine is a gateway to pain, to the reception, and to the promotion of social, psychological, biological, but also political well-being. Every medical appointment is an empowerment space. By fighting for “a free world” (the name of our project in Portuguese), we need leaders from a new Brazil, from doctors who defend minorities, to change the way we do medicine. Efforts to build these leaders, we deliver changed and excited medical students.
Universal health coverage is one of the hottest topics nowadays, it is above all a human right and an aspiration to reach. The Algerian government, since its independence in 1962, has provided immense resources to improve the public health sector, and indeed we are at 76% health coverage which is a prominent achievement for a developing country. Still, despite all of these valued efforts, 24% of the population still does not have access to healthcare services in Algeria even when it’s free of charge.

From there, we medical students of Le Souk Algeria decided to have a national project of medical caravans, under the slogan of “Your health matters for us and the distance does not hinder us”. The innovative activity did not only help vulnerable populations in rural areas and offer them granted medical care, screening tests and awareness workshops on common health issues, but also it played a role in diminishing medical social inequities in two main Algerian cities: Constantine and Batna through three editions.

The whole activity was set by members following a proper activity management process. First, they started by forming multiple organizing committees, each one was in charge of a specific task: Checking the administrative process, visiting the villages and choosing the activity avenue (primary school, municipal library and a big tent set in place), contacting doctors, gathering medicines from some sponsors and drugstores donations, collecting clothes and food through the social media campaign, preparing for the different workshops (brochures, teddybears, gifts, toys, etc.) and setting up an efficient plan for the D-day.

Several medical staff personals from various specialties accepted the invitation, and so we formed a complementary holistic team present in one small hospital and comprised of: pediatricians, orthopedists, gynecologists, dermatologists, otolaryngologists, gastroenterologists, psychiatrist and family doctors, nurses and interns.

On that special day, all the members were present in the hospital, some in the different consulting rooms, others in the pharmacy, and the rest divided between the awareness corner, the teddy bear workshops, and the clothes and food “store”.

It was heartwarming to say the least! The now empowered medical students were applying what they learned but in a live real scenario, under the supervision of physicians and experts. It was a beautiful symbiotic scene to admire, a glimpse to the reassuring future of our healthcare handled by health advocates and reformers!

By the end of the three editions, we evaluated our activity and made sure our goals and objectives were fulfilled successfully. Even the feedback received from the tackled community was inspiring, satisfying and filled with gratitude and appreciation.

And this, ladies and gentlemen was our success story that we are so proud of, such a diverse engulfing event joining all of our committees, solely organized by students aged between 18 and 25 years old pursuing the one and only dream “health for all, everywhere”.

www.ifmsa.org
“Standing Committees Medical Outreach (SCOMO) is an envision activity aimed at solving a common problem in different dimensions. This activity seeks to unite all standing committees within the Nigerian Medical Students’ Association (NiMSA) in making a great impact by harnessing the powerful workforce of unity and dispensing to targeted area healthy eating practices. SCOMO is carried out by students of Nigerian Medical Students’ Association (NiMSA) and enrolled under the Healthy Lifestyles and Non-communicable Diseases program of the International Federation of Medical Students’ Association (IFMSA), comprising of the following components: education to secondary school students and their teachers, Advocacy for adequate nutrition to those in humanitarian setting and research on the Assessment of knowledge and practice of healthy eating Practices among Secondary School Students in Nigeria.

For the secondary school campaign, we developed a module used in training the teachers of targeted schools. This module encompasses approaches in maintaining healthy lifestyle focusing more on the aspect of healthy eating practices. For the students (targeting fifty Secondary schools within the NMO totaling forty thousand students) we approach our activity in a similar way like the teachers training but in a more practical way of educating and teaching them on how to eat healthily, maintain a healthy lifestyle through in-cooperation of exercise to keep fit.

Part of the SCOMO activity we conducted research which provides information for future teaching on healthy lifestyles, making recommendation and advocacy. The final aspect of the activity is the outreach to displaced camps in Nigeria, online and physical advocacy for persons living in humanitarian settings. This aim at bringing to the public and necessary authorities about the unhealthy dietary lifestyle of persons living in displaced settings due to inadequate materials and to advocate for their rights, identifying and facilitating requests for their needs. SCOMO is an activity with a multi-discipline approach to address issues on dietary lifestyles especially on healthy eating by training and educating secondary school students and teachers, research and advocacy for displaced and malnourished persons.

The Forum was the closing event of the campaign. To make this possible we worked with UNAIDS and others NGOs in mutual collaboration.
This alliance was a bridge that helped us to contact other specialists, doctors and activists who are engaged with fighting myths and educating based on scientific facts and to reaffirm that HIV is not synonym of death, and that people with a positive diagnosis still have an opportunity in life once they follow the ARV therapy. Besides the informative part, we made the final report of the campaign. Also, we provided a stand for free quick HIV-test.
Mental Health Project

China - Hong Kong (AMSAHK)

In more traditional cultures like Hong Kong, mental issues are generally not recognized or considered as an actual sickness, but rather stereotyped to be an issue that could be resolved with time. This wrong school of thought has prevented many from seeking help, as they do not want to be perceived as weak or incompetent, but at the same time spiralling them further down the bottomless pit of helplessness. This is prevalent amongst Hong Kong medical students, as stress is generally stigmatised as something all medical students will go through. Here in AMSAHK, we want to take action from preventing this to be in embedded in our culture.

By utilizing the month of March, which is a time period not too long before examinations, we hope to resolve this issue through 3 main objectives. Firstly, before we should even care for others, we should look after our own well being. Secondly, if we could overcome these obstacles, we hope that fellow students can turn this experience into useful advice, whether it is getting out from mental conditions or preventing themselves from falling into traps. Finally, we hope they can spread the message to the general public to initiate a starting point for the change of society in terms of viewing mental health differently.

Hence, we designed three programmes, first being the Dr. Dogs day where we want to alleviate stress in a stress-free environment and provide faculty staff in order to encourage interactions and understanding between student and teaching staff members. We want to tell people mental health can and definitely will affect anyone, and by providing goodies bag, we hope to at least give students half an hour of joy and encouragement. As many have said before, a small step will make a big difference, and although we might be there for a short period of time, it’s clear many students day were brightened up a bit.

Secondly, through Crisis negotiation workshop, students can not only gain professional knowledge on how to break down high stakes situations, especially people with mental health issues. Active listening and interacting skills were taught and students were given the chance to practice what they learn through a one-on-one approach.

Finally, our mental health first aid aims to target a more niche audience, a bunch of aspiring medical students from secondary school, in order to give them basic knowledge while at the same time hoping they could spread the word or initiate a topic of discussion with friends and family.

We received many good reviews from students who have participated but undeniably the impact could expand if the project could be expanded and continued through the next few years.

We hope to have our mental health project extended as an annual tradition, in order to truthfully assess the amount of success we have gained, or to learn from the mistakes we have made through the years. In conclusion, mental health project did increase students awareness and have a positive impact on students’ lives.
“Have you ever thought of a world without NCDs? Have you ever thought of a place where no one is suffering from a deteriorating health because of these diseases? Have you ever imagined what it would be like if we won the battle next week, next month, next year, next decade or even the next century? Can you imagine how much people's lives would finally be safe and sound? In IFMSA-Egypt, we had this utopian dream and no matter how hard it is, we decided to take the challenge, not just for the sake of us, but for the sake of upcoming generations, who have the complete right of living a healthy life in a healthy world.

NCDs is currently the oldest and biggest project in SCOPH in IFMSA-Egypt. Years have passed and hundreds of national and local workshops on the NCDs, their risk factors and the healthy lifestyles have been conducted for our members to raise their capacity, in both knowledge and skills, regarding such an important public health issue that jeopardizes the Egyptian nation's lives from the youngest one till the oldest one. These workshops were the igniting flame that allowed them to carry on their job, as future health care professionals and public health leaders, of spreading their knowledge viral, so that the highest number of general population, including men, women, elderly, youth and children, know more about their number one enemy; the NCDs and how to prevent them in order to live a peaceful life.

Not only did our members conduct hundreds of physical and online campaigns and raised the awareness of almost half a million persons in this country through different platform, our members also worked on advocating for better policies, that insures that the Egyptian's lives are in safe hands. Although we have initiated many partnerships with governmental and non-governmental organizations, the policies are not yet implemented, but guess what? We never lost hope and we continued on our journey for more than 4 years now and we are still continuing.

But what’s sustainability without development? And what’s development without continuous monitoring and evaluation? Our project has been successful for years now because of the successful monitoring and evaluation techniques we were using, which included both quantitative and qualitative methods. Quantitative methods included counting the number of campaigns, outreach in both physical and local campaigns, number of attendees in workshops etc , while qualitative methods included statistical analysis of pre-post questionnaires in every step we take.

NCDs has always been an aggressive enemy to mankind, destroying everything in its way. Now it is time for us to stand together, hand-in-hand, to learn from each other and to develop ourselves, lives healthier and safer by being better capacitated future doctors and public health leaders, ready to sail with our communities from the dark waters of diseases and death to the pure waters of health and life.”
SCOME CIMSA UNS and SCORA CIMSA has conducted a project called SEDUCTION: Sex Education for Intellectually Disabled, which is located at Extraordinary Type C Setya Dharma School Surakarta. We do this activity, based on our concern for the mentally disabled, because of its limitations and innocence in receiving information, often they become victims of sexual harassment itself. This is because they do not get sexual knowledge from school, parents, or may even get wrong knowledge from the people around them.

Therefore, SCORA and SCOME CIMSA FK UNS took the initiative to teach those who are mentally disabled about sexual education itself guys! The mentally disabled students we gave were those who were able to teach at Extraordinary Type C Setya Dharma School, Surakarta. We also work with the Special Education Student Sebelas Maret University Association. This activity is divided into 3 main series, namely training with experts, namely lecturers from special education study programs, training with Peer Educator Trainer of SCORA CIMSA UNS, and peak activities, namely direct intervention to Setya Darma SLB-C.

Before teaching children, we are first taught how to interact with them. That was what we did in the first series of our activities, namely training about developing student communication to mentally retarded children, which was delivered by Mr. Anwar, M.Pd, lecturer from Special Education Study Program at Sebelas Maret University. Here we are taught that, in order to communicate with them, the importance of teaching aids, patience, and continuous repetition of the topic being taught, and the importance of planting the concept itself.

The next day continued with training from Peer Educator Trainer of SCORA CIMSA UNS, Vita Yuniar and Anggun Pulihana. Here, we are taught about information on how to care for sexual hygiene, how to guard against sexual harassment cases, both in terms of male and female aspects. Here we also do a role play to educate mentally disabled children about sexual education.

In the next intervention, on May 2nd, 2019, we conducted our peak activity, where we together gathered together with Mentally Disabled Children in Extraordinary Type C Setya Dharma School, Surakarta. There we play, have fun, dance and sing together, also watch cartoons together. We also teach them how to clean genitals, how to urinate properly, how to protect genitals properly, and also how to avoid sexual abuse. For the mother and father of the teacher who accompanied, we also conducted a free health check, such as blood pressure and blood sugar measurements, carried out by the SCOME member and SCORA CIMSA UNS FK.

At the end of the event, there were also games, where the winner received a gift, then closed with the distribution of gifts, snacks, and photos together. The hope is that they will understand more about sexual education, and will no longer be vulnerable to being the object of sexual violence that happened to them, and train us also in communicating to them and we will increasingly know about sexual education.”"
According to the WHO: “Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 71% of all deaths globally. Each year, 15 million people die from a NCD between the ages of 30 and 69 years; over 85% of these ‘premature’ deaths occur in low- and middle-income countries. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.0 million), respiratory diseases (3.9 million), and diabetes (1.6 million). These 4 groups of diseases account for over 80% of all premature NCD deaths. Tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets all increase the risk of dying from a NCD.” Also it stated that “Detection, screening and treatment of NCDs, as well as palliative care, are key components of the response to NCDs.”

With this in mind we designed Med On Tour, an activity that aims to be a beacon of prevention and health advocacy. Its goals are to raise health literacy, promote healthy lifestyles and prevent Non-communicable diseases. Through training sessions and workshops, medical students are prepared to be active health advocates in the community, providing them with the tools needed to facilitate some lectures and communicate with the communities and their patients. Also, they receive the necessary technical medical training to screen the population’s glucose level, blood pressure, anthropometric profile and other health indicators.

To implement the activity several partnerships are developed with the National Health Department, Local Governments, Business Owner and Schools, so, as we can see, is an activity that demands a lot of synergy and collaboration with other entities. However this demands also highlight the joint collaboration developed to effectively reduce the impact of Noncommunicable diseases and the burden they represent.

“Rural communities have long struggled to maintain access to quality health care services. A variety of elements contribute to these problems in rural areas, including a declining population, economic stagnation, shortages of physicians and other health care professionals, a disproportionate number of elderly, poor, and underinsured residents, and high rates of chronic illness.”
Med On Tour also aims to reduce the gap between health care services and the rural communities. Thought this activity, the target rural communities have several of their health indicators screened and receive lectures and advices on a number of health related topics. Once again, the goal is to raise health literacy, promote healthy lifestyles and prevent Non-communicable diseases, especially in these communities than more often have a difficult access to health care services.

Millions of people day every year because of NCDs and we as medical students and future health professionals have the responsibility to help the world fight this problem.

Med On Tour aims to empower medical students to be active health advocates in the communities that most need our help and to be a beacon of prevention and health advocacy nationwide.

Activity coordinated by Elisabete Mota Neto
Written by José Ganicho

### Medical Students Humanitarian Campaign (MedHum)

Equal opportunities for every gender is a necessity for optimal health for all. In working with global sexual and reproductive health we must take this with us as a principle.

Earlier this year I attended the MM19 in Slovenia. During this meeting we celebrated the aims for gender equality amongst health workers.

Under the slogan “it starts with you” I got the opportunity to reflect on inequalities between genders as a significant health risk and contribution to the global burden of disease, something I must admit to not being fully aware of until my first GA.

Restrictive and outdated gender norms affects us all, our health and how we live together to form societies. According to an article in The Lancet, gender inequality is the biggest promoter of inequalities in health of our time, and a determinant of health amongst all genders (1). Hence, conservative gender structures are not only issues within the work environment and education, but also indicates early death and morbidity.

Lack of gender equality causes immense loss of health for millions of women all over the world, and is a considerable driving force for determinants of illness amongst men. Not to mention the tremendous loads transgender and non-binary people suffer under restrictive gender norms.

During the next year, we in the Medical Students Humanitarian Campaign (MedHum) of NMSA (Norway), together with Save the Children, will support sexual and reproductive health and rights (SRHR) with

NMSA Norway
adolescents in Malawi, with an emphasis on teenage pregnancies, under the slogan “A Child Not A Mother”. In our target area, one out of three girls gets pregnant before the age of 18. This leads to high rates of premature babies, unsafe abortions and unfinished education. Not to mention the toll on young teenage fathers that are exposed to significant determinants of morbidity and early death by having to take on extra work, often tough physical labor for hours longer than anyone's back, joints and ligaments would benefit from.

We see great progression of the work being done in the rural areas that we focus on. Nevertheless, we see that the situation for the time being, with the many teenage pregnancies as our main issue, is associated with high child mortality and lack of self-determination, making it a pressing concern for the global burden of disease as well as a question of autonomy, equality and lost opportunities. Thus promoting great inequalities in the access to education and income, therefore holding the population back as a whole.

Gender equality is one of our common Sustainable Development Goals, and because this equality promotes lower mortality and morbidity for both mother and child, we have chosen to work on this issue for our upcoming campaign.

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https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)33135-0/fulltext?fbclid"
"According to UNAIDS, in 2016 Panama registered 1300 new HIV infections and adults over 15 years old living with HIV are approximately 24,000 with a prevalence of 0.8% in adults between 15 and 49 years old.

The population that registers the majority of new cases are young adults, who out of fear prefer to ignore their status on HIV and do not initiate antiretroviral therapy, which in Panama is totally free for all people living with HIV; the fear is to be discriminated against, rejected, stigmatized and not be able to continue with their normal life, which only with education to the population in general can be solved.

In 2016, Bill 61, which is a bill to integrate sex education in schools in the country, was rejected, so there is no national guideline on sex education for children and adolescents.

Added to the above, in the academic curriculum of medical students, only HIV education is taught in the infectology and microbiology classes, leaving aside any education regarding human rights, approaching the person with HIV and prevention. With this activity we also want to remember respectfully the friends and family we lost in the fight against HIV and AIDS due lack of treatment and stigma in our country. Since this is a complex context, we believe that it can be addressed through our four Standing Committees, providing an integral approach of the problem and execution of the project.

The project had three phases:

Trainings for medical students who will facilitate sessions in schools, we give them soft skills, scientific information about HIV and AIDS and an inclusive approach of the topics. We reached 158 medical students.

Social Networks Campaign: Focus on general population to know general information, being more sensitive and educating about how people living with HIV and AIDS could have a normal life and which are the consequences of not taking the ARV therapy.

We also contacted some influencers in our country appealing to their social responsibility within our population by sharing relevant information and no discrimination messages.

Local schools campaign: involves projecting ourselves medical students to school students where we applied all what we have learnt in the past months of preparation. This phase is basically the way we go directly to the population because we prepared tours for 8 schools. We reached 1823 highschool students.
Message from the SCOME Director

Dear SCOMEdians,

The scope for Medical Education is endless and the articles shared for the MSI show exactly that. This edition includes different perspectives on how to improve medical education and empowering students to be more active participants in their curriculum’s design and delivery, projects on research and incentivizing evidence based medicine and one or two ideas on discussing individuals and humanity in medical education and healthcare. To all the readers, we hope you get inspired by these examples, to take on action by yourself and share your examples with us.

We are sure there are more inspiring, great activities out there and we look forward to seeing more articles, more different approaches to Medical Education and all the regions represented in future editions. Meanwhile, enjoy and take your time to analyse these ideas, how they are implemented and assessed to make sure we are continuously improving our work.

Hugs,
Catarina
Believing in universal access to emergency health, Doctors Without Borders (Médecins Sans Frontières) was founded in 1971 (1). Currently, 58% of assistance projects are in Africa and 28% in Asia and the Middle East (2). Each project has a trained team, providing first aid, medical screening, facilitating access to health services, and often dealing with refugees, and the psychological consequences of the situation (3). Each year, projects are opened and closed, with flexibility to respond to the changing needs of patients. In 2008, 65 countries had projects in their territories, with more than 25,000 professionals (1). In addition to health care operations, Doctors Without Borders (MSF) maintains informed public opinion about the precarious conditions of refugees and their humanitarian work in refugee camps (3).

The event, took place at UniCesumar University, on May, for all students in the health area. The event was created because we perceived the interest of the academics about the organization, and from that interest the coordinators wanted to show through the speakers’ experience report, the socio-cultural influence on the health-disease process in the treatment of patients. The first lecture was given by nurse Janaina Carmello, who through her work in a refugee camp in Ethiopia exposed the close relationship between religion and the medical decisions made by the patients. Carmello encountered countless women, victims of rape, who requested an abortion, the necessary procedure, because if the husband or the relatives knew of what happened, they could be burned alive because of their religion. The second speaker, doctor Felipe Valeschi, elucidated the relationship between socioeconomic conditions of the population and the health-disease process, emphasizing the importance of public policies to eradicate this reality. Finally, the event closed with a roundtable, in which students were able to discuss with professionals about the similarities and differences that surround the public health system in Brazil and the places where they worked.

The event carried out was evaluated through computed and interpreted data, which were obtained before and after the event, and were subsequently compared. About 154 participants from various courses completed both questionnaires. Some data remained stable between the pre-event and post-event questionnaire, due to prior knowledge of the participants. These are: the concept of the MSF program; the minimum monetary amount to contribute to the Doctors Without Borders; the possible ways of assisting the Organization; the areas of operation of the program; those benefiting from the project and the countries benefiting from MSF.

It was interesting, however, to observe some changes of thoughts that the participants obtained with the event, such as the remuneration received by the professionals, and 55.35% believed that there was no such payment because it was a voluntary program, a misconception that was clarified during the event and, therefore, this number who were aware of remuneration reached almost 98% in the final questionnaire. In addition, we observed that there was a 20% increase in the number of people who knew that MSF was made up of professionals from different areas. And we considered the change of opinion about the members...
of the organization, where only 1/3 of the participants knew that only graduates could work for the project, which almost reached the totality in the second questionnaire. Therefore, upon reflection it appears the event, through the experiences exhibited by the participants, provided a paradigm shift, bringing the students closer to the understanding MSF, being able to provide future volunteers for this Organization or similar, as well as providing participants to have a more humanized perspective and realize that simple initiatives during care can alter the reality of an entire population.

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Emergency Week: Mother and Child edition

Saad Uakkas and Salim Ben Souayah
IFMSA-Morocco

In Morocco, Emergency care is the main activity where students have the least amount of supervision, so it is mandatory for students to be academically prepared. However, our medical curriculum lacks drastic methods to equipe medical students with the right knowledge and skills to be prepared for their role in Emergency care, since Emergency Medicine is mainly a lecture-based topic in our medical curriculum.

Seeing the current situation. UCEMO, one of the LCs of IFMSA-Morocco have started an educational activity called Emergency Week which is a bi-annual project organized since 3 years. This project is a week-long series of simulation workshops and seminars about many cases that are often seen in the Emergency department, in order to help medical students reason with urgent and critical cases and understand the process of treatment choice. With the help of the intensive care and surgery professors, our members start with designing the agenda and the schedule of the week and choosing the main theme and different simulations and workshops. After that we select participants by making a registration form and sharing it in different social media groups then selecting participants. The selection process is usually very challenging and based on motivation, the level of studies and other factors. Participants confirm the selection process by paying a symbolic fee to confirm their spot. After that we divide participants to several body groups with tutors that ensure needs assessments, continuous follow-up and support, monitoring and evaluation of every group. We
then prepare the students for the week with some theoretical knowledge and resources to read. We then hold the main event during which students benefit from several workshops, seminars and conferences, and practical scenarios and role-plays which aim to teach them the skills, attitudes and behaviors to have in different situations related to emergency and urgent medical and surgical situations. We ensure daily and final evaluations and feedbacks for participants as well as graduation exams where they perform the different skills and they receive certificates signed by our faculty and professors. We also try to make it competitive by giving prizes to brilliant students and teams.

In the last three years we have done six editions reaching more than 750 students and focusing on topics such as first aid skills, surgical emergencies, intensive care emergencies, infectious diseases emergencies and others. This year our activity received the prize of best youth-led activity in the city.

For its 6th edition our members chose the theme of “Mother and Child” in collaboration with one of the departments of the Mohammed VI hospital. This edition included multiple specialties such as gynecology, neonatology, pediatrics and pediatric surgery, and first aid for the first cycle students of which 124 students has benefited.

For the next editions we are planning to implement the project in other LCs and create national competitions for emergency medicine between students as a follow-up. Because we believe that Emergency medicine is a priority that needs to be tackled, because our system doesn't give it the importance it deserves and because we medical students can take the lead in making that happen.
The exposure to new teaching-learning methods in higher education, different from those traditionally adopted in high school, can affect the adaptation to the new teaching environment and consequently the quality of learning, which, in turn, may be correlated to the emergence of psychiatric disorders. In Brazil, 15% to 25% of university students present disorders of this nature, with a higher prevalence in medical students.

The substitution of “traditional” methodologies for active teaching-learning methodologies is a worldwide trend in universities. Active methodologies place the student as the center of the learning process, making it exercise its autonomy. The application of such methodologies in the area of health, especially in medicine, seeks to form differentiated, proactive and humanized professionals. Problem-based learning (PBL) is highlighted as the prototype of the current active methodology and is the main method used in the University of the State of Pará (UEPA).

The PBL is characterized by the process of acquiring knowledge through exposure to problems or cases, and its application is done in groups, in a dynamic called tutorial session. The adoption of PBL in medical schools is related to the improvement of learning and communication skills.

In this type of methodology, the teacher (tutor) has the role of facilitator of learning, stimulating the student to actively seek knowledge, ensuring autonomy and critical thinking. In a tutorial session, initially, students identify the core ideas (problem) presented in a base text. Then the participants present explanatory hypotheses for the problem, based on their previous knowledge. In another moment, the students come together to share the results found in the individual study and discuss collectively.

In order to reduce the negative impacts of exposure to a new teaching-learning methodology, the IFMSA BRAZIL UEPA and UEPA Academic Center of Medicine carried out the activity “Meducation: An Introduction to PBL” as a way to introduce freshmen to the functioning of the PBL's tutorials sessions.

Fifty-eight medical freshmen of 2019 were divided into six groups and exposed to simulations of tutorial sessions. For each group, two sessions were held, an opening and a closing. In these sessions, the PBL...
mode of operation, the development of a
tutorial session and the functions of each
participant were explained. The themes
addressed in all groups were: principles
and guidelines of the Brazilian Unified
Health System (SUS), SUS's levels of care
and humanization in care. Twenty-four
medical college veterans served as tutors,
coordinators, and non-freshman tutor
participants. All tutors prepared for the
role of tutor by studying the Meducation
Manual, prepared by the coordinators of the
activity, which contained instructions on
how to proceed during the tutorial sessions
and addressed information to be presented
to the freshmen.

At the beginning of the first session and at
the end of the second simulation session,
freshmen were asked to answer the impact
assessment questionnaire, consisting of
eight objective questions (five “yes or no”
questions and three with multiple choice
answers) which evaluated the participants' knowledge about how PBL works and about
the dynamics of the tutorial session.

Only the data of 36 participants who
attended the two sessions and filled out the
questionnaires correctly was analyzed.

The results showed that the number of
participants who indicated that they knew
about the functioning of the PBL (Question
1), understood that the PBL was based
on the active transmission of knowledge
(Question 2), perceived that the method
allows greater autonomy of study (Question
3), and know the criteria used in the tutorial
evaluation (Question 4) and to know how
the tutoring is organized (Question 5)
increased after the activity was performed
as shown in Figure 1.

In addition, the number of correct answers
on the questions that investigate the role
of the tutor (Question 6), the Coordinator
(question 7) and the Secretary (Question 8),
increased after the activity was carried out
as shown in Figure 2.

The main objective of the activity - to
familiarize the freshmen with the PBL - was
reached in a satisfactory way as indicated
by the results. Considering the positive
results, that the simulated sessions are easy
to apply and have of low cost, it is suggested
to apply the Meducation to all freshmen of
the UEPA course of medicine, promoting a
healthier adaptation of the students to the
university context.

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**Introduction**

Suicide is characterized by the act of intentionally causing one's own death, and it can be prevented in 90% of the cases. Brazil is ranked ninth among the countries with the highest suicide rates (1). The issue has an individual impact as well as a public health impact due to its social, epidemiological and economic content (2). Thus, when we think of the relationship of suicide with medical students and medical professionals based on current studies and reports, we used the context of suicide prevention month titled “September Yellow” in Brazil and we developed an activity in the IFMSA FCMPB local committee. The main objective of the action was to prevent suicide attempts among medical students involved, in addition to reducing the degree of anxiety and depression when discussing means of prevention and stimulating students’ awareness of the issue.

**Methodology**

The study is of the type of experience related to the activity, which took place at the Faculdade de Ciências Médicas da Paraíba, by the IFMSA FCMPB committee on September 25, 2018. In the activity, an excerpt from the film “The Seller of Dreams” was shown, and a questionnaire was distributed about mental health, for reflection of the students present and for the awareness about the support in the faculty. There was a lecture by psychiatrists Raquel Mendes and Caio Uehara, and an exposition of suicide rates and their relation with medical students and medical professionals.

Finally, an additional survey was sent to participants to assess the impact of this activity.

**Results and Discussion**

313 students from the Faculty of Medical Sciences of Paraíba (FCM-PB) were surveyed, anonymously, with questions such as: “Have you ever presented or present any symptoms of depression or anxiety?” Where 69.9% answered “yes”, and the other 30.1%, “no”. The following question was asked: “If yes, did these symptoms have / have relation to the academic life?”, 51% answered “yes” and 49% “no”. To know the amount that sought help, we asked: “When they presented, did they seek help from a professional to improve?” 32.1% of the students answered “yes”, 37.1% registered “no”. 30.8% reported never having experienced such symptoms.

In the penultimate question, it was asked: “At the present moment, do you feel pressured by academic duties?”, 66.1% said yes, and 33.9% said “no”. “In relation to the video exposed, did you feel any emotional impact?”, 79.8% of the students answered “yes”, and the other 20.2% answered “no”.

The second stage, represented in the lecture held by IFMSA of FCM-PB, with the theme “Sharing is always the best option”, attended by 72 people, questionnaires were delivered, which were aimed, through anonymity, to assess participants' adherence to the theme. When asked about the lecture, 93.1% of respondents answered that it was “great”, 6.9%, classified as “good”. 100% of the participants stated that the lecture had a positive impact, and 100% believed that the event should be held every year. In addition from the results of the questionnaire, it was possible to obtain a broader view of the students’ mental health and their behavior towards the situation.

Therefore, it is noted that the present study,
to signs of anxiety and depression. Since the number of suicides in our society is significant, it is important to find ways to cover at-risk populations, in this case medical students, in activities that may show that this is not a solitary struggle, that these may be advised and heard by professionals. It is important to know and talk about risk factors and injuries, as we are talking about the importance of life. Thus, information along with mental health awareness during and even after medical school are great allies in an attempt to reduce this growing number.

Conclusion
The experience was significant in view of the results obtained in the questionnaires, thus achieving the objective of the activity. It is important to emphasize the theme with health education in the entire population, especially in the group studied, which is one of the most affected.

The population should be given support, lectures, campaigns and incentives for the valorization of life, generating mental health promotion and suicide prevention. Actions like this are fundamental to spreading knowledge about this delicate and current subject in society.

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When students become tutors, a new approach to mentorship for a better medical education

Maha MEZOUAR and Saad UAKKAS
IFMSA-Morocco

Entering Medical school, a dream coming true, moving out of your parents’ house, cooking your own food, respecting your own timetable, making your own decisions, living your own life but all the things you have been dreaming of since before high school take time to settle, and that time is different from one person to another and it is tightly related to each person’s ability to adapt.

Adaptation is the key to survival, and when it comes to medicine, it is no secret to all students around the world that the first year is chaotic and weirdly challenging, each individual is trying to find where they belong and to locate themselves inside this new environment. The difference between high school and college is mainly detectable in studies; most students, if not all, find it very hard to rely only on themselves to do their research alone, without guidance, to look for exercises and exams to practice, especially Moroccan students who are used to having after-school classes or private tutors to help them out with their homework and to boost their capacities in an individual-centered environment.

To solve this dilemma, IFMSA Morocco designed a tutoring system where elder medical students offered to tutor the younger ones in small groups where they explain some difficult lessons in subjects such as anatomy and biochemistry. In Rabat LC, the organizers choose tutors from 2nd year and above, while in Oujda LC, the tutors are passionate residents who care about the quality of medical education and want to take part in improving it. All these amazing engaged medical students and doctors shared their own methods while dealing with certain subjects by giving efficient advice on
exams preparation and stress management. At The Hong Kong Polytechnic University, a study has been conducted among nursing students in order to facilitate the development of cooperative learning through a peer-tutoring scheme. The analysis of the interview scripts have shown considerable evidence that supports the positive effects of peer tutoring, including cognitive gains, improved communication, self-confidence, and social support among students. Peer tutors were also said to better understand the learning problems of fellow peer learners than teachers do. Unlike the classic tutoring methods, this one only gives enough knowledge and experience to tutees to rely on themselves and take over the learning process. On top of that, it is a good way to meet new friends and to become engaged within the medical studies atmosphere. Henceforth, the good influence of tutors on their tutees is one of many reasons for the sustainability of this project. Up until now, we have ensured more than 240 tutoring sessions in four faculties, with more than 1050 students tutored and 137 tutors. We are working on introducing the system in the other faculties and discussing with our deans to have a tutoring system implemented on the long term and have bonuses for tutors and other added assets.

Earlier this year, in Marrakech LC, the students developed the idea of promoting a new type of mentorship so they would cover not only the theoretical subjects but also hospital internships, and to target a larger population of medical students. “Humans of FMPM” is a series of videos made by medical students, interns and residents, who give their secret recipes to have a successful internship and pass exams with flying colors. They highlight the goals that must be attained during certain medical or surgical rotation, and how to actually benefit the most from each period spent in every department. It is also an occasion to remind future doctors watching these videos of the true values of medicine and the right ways to deal with patients.

This new approach to mentorship has been welcomed by more than 1K students from all over Morocco and we’re planning to extend this format to the other cities.
“ A 21st clinician who cannot critically read a study is unprepared as one who cannot take a blood pressure or examine the cardiovascular system” - BMJ, 2008

We are in the era of evidence. With the marvelous advances in science and technology, it became obvious that we shouldn’t say or decide anything without having what proves it. Otherwise, we will bring about disastrous errors to ourselves and our communities.

If we take that to our medical field, we will find that we can’t make a decision concerning healthcare without having a solid evidence that allows us to do what we plan. That’s why there are guidelines for health practice and that is what’s now called Evidence Based Medicine.

Evidence Based Medicine “EBM” - or Evidence Based Healthcare - is an approach to patient care in which decisions about the diagnosis and management of the patient are made depending on the integration between 3 components: clinical expertise, best evidence from research and putting patients’ values into consideration 1.

It is the recently applied method in healthcare as it provides the surest and most objective way to maintain high quality and safety standards in medical practice and this contributes to reducing the clinical errors caused by doctors 2. Consequently, a lot of medical schools around the world have included EBM in their curricula to teach their undergraduate students - and future doctors - the methods of using EBM in their work. However in Egypt, EBM - with its complete concepts - wasn’t included in the medical schools’ curricula in past years - fortunately it has been included in the new undergraduate medical education system applied this year.

As a result, thousands of medical students have graduated each year without knowing EBM methods properly, and some don’t know anything about it. They depend only on clinical expertise acquired during work and think it is enough to provide appropriate healthcare. They also don’t follow the updates in clinical research and don’t care about patients’ values, resulting in daily continuous mistakes during their work 3.

All of that encouraged us to try here in Mansoura -a full member local committee of IFMSA-Egypt which is a full-member National Member Organization of IFMSA- to contribute to solving this problem by working on three issues: Firstly, we worked on spreading the awareness among Mansoura medical students about EBM by holding physical and online campaigns where they became more oriented about EBM: what it is, its components, its importance and how to apply it in their work in the future, with a reach of 900 medical students in the physical campaign and 20K in the online campaign.

Secondly, we took the second component of EBM - which is dependence on best evidence from research - and worked on providing the medical students with its necessary skills by organizing a 3-day basic EBM workshop where 23 Mansoura medical students received an introduction to EBM, learned about study designs, searching databases, scientific writing and medical statistics.

Thirdly, we didn’t stop at providing the skills of how to apply EBM, but also we tried to contribute to developing EBM by providing the skills needed to add new scientific researches that we can depend on as evidence. So, we organized a 4-day systematic review and meta-analysis workshop where 15 Mansoura medical students learned about EBM, systematic review,
how to collect and extract data from research papers and meta-analysis. We chose systematic review and meta-analysis as they come in the top of EBM pyramid for being the best study design that we can depend on and generalize their results on the whole population. Also, the guidelines - which clinicians depend on in applying EBM - are set based mainly on it 4. From all of that and from the feedback, I can say we made a powerful impact inside our local community. However, there is more to be done to decrease clinical errors caused by lack of orientation of EBM. And finally, let's Depend on Evidence.

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Traditionally, education has been based on the perspective of the student as a passive agent, whose function is merely to receive the contents of its masters, with the purpose of reproducing such ideas. In contrast, new challenges that confront this process have been based on positive transformations that develop within the student as thinking and contributing to an exchange of learning. In the context of medical education, it is fundamental that the student feels motivated and challenged to explore what is presented to him, in order to deepen their knowledge, in this sense, research is found as a pedagogical mechanism, able to assist them in this way.

Research represents an important tool for the formation of a new professional profile, the critical-reflective being, which understands its social function and the possibilities to improve its work through research. In addition, the health education process proposes the autonomy of the student as a transforming agent of their reality and values the search for means that make it possible to realize this presupposition. In the words of the patron of Brazilian education, Paulo Freire, “those who teach learn by teaching, and those who learn teach by learning” and the modern medical education is guided by the autonomy of the agents of this process, by the exchange of knowledge and reconstruction of knowledge, so essential in the face of constant changes in the medical field; in this perspective, research is therefore a fundamental way of improving the health professional.

In this context, student-centered protagonism as a reflection of active study methodologies is an effective and factual process in education. Recent discussions about synchronizing the Scientific and holistic knowledge of medicine bring the concept of Scientific Divulgation as an important guide. This concept addresses the importance of popularizing science, making it accessible, of great impact, associated with the local and global community, and without leaving its methodological characteristics aside.

Therefore, it is important that events for the construction of Scientific Divulgation are carried out, since these are capable of bringing another evident situation: that medical students must fight for the principle of Scientific Communication: that brings the democratization of knowledge produced in the current science and health scenario. The purpose of this article is to highlight the role of the Publication, Research and Extension work of IFMSA Brazil in the scenario of medical education allied to scientific development, through Scientific Moments promoted by this NMO. Scientific Moments are occasions during official IFMSA Brazil’s events where local coordinators can share their diverse researches and activities with the NMO’s community. They are separated in Poster Fair, with poster presentation and analysis; Activities Presentation, with oral presentation and votings for best activities, both having separate certifications and awards to increase scientific divulgence.

IFMSA Brazil’s General Assemblies occur biennially in conjunction with the Scientific
Moment and, in order to materialize these events, considerable efforts are required by various agents. In this context, with the opening of the submission of papers, a major national task force started to support the submission of papers that are developed by the members, and this support includes the work of the National Publication, Research and Extension Team and its director (a key factor for improving reach and adherence as well as decentralization of information). Each Scientific Team assistant helps local coordinators by sharing knowledge and experience with each other to enrich publication perspectives by encouraging scientific production based on the various NMO activities undertaken. In order to promote this orientation, the team actively works by scaling up publishing opportunities and managing the difficulties encountered in the writing of papers, as well as discussing ideas for the improvement of the scientific text, by awakening the critical-reflective thinking of each writer.

The increase in the number of submitted works was progressive, and the improvement in the quality built by means of the construction of the acquired knowledge by means of capacitations at local, regional and national level, complementing the curriculum and providing opportunities for professional growth.

At the same time, the directorate of research was inserted in the executive board, being no more than support division, allowing greater integration of the scientific axis with other axes. In addition, it provided greater independence to the position and, therefore, greater comprehensiveness of the connection between the functions of administration. Therefore, the importance of the scientific moment has been built over time based on many discussions about the importance of inserting an administrative autonomy of the work of scientific communication in the NMO guidelines. Consequently, the development of scientific moments in their events and the perspective of growth of this work were significant.
Development of medical education from the incentive to publication and research

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The importance of the active methodologies in the construction of teaching-learning of the medical student is undoubtedly, especially when it comes to teams for building skills and abilities. The experience of this in living work on acts of the NMOs is a way of inserting the medical student in the construction of a different reality, which involves the exercise of health in a more conscious and proactive way.

However, none of this becomes fruitful without the development of experiences and skills in NMO Management and, in order to build an organized and effective research hub, a lot of work, study and execution of a long strategic plan was necessary, that nowadays harvests numerous fruits from organized work locally and globally.

This research is a transverse, documentary and quantitative work. The study was based on data obtained throughout articles from IFMSA and IFMSA Brazil, as well as scientific events from IFMSA Brazil. The discussion in this paper encompasses the importance and history of executive management of IFMSA Brazil with the purpose of developing the scientific axis of this NMO with innumerable strategies that have brought benefits when summarized and well-architected.

To comprehend this development, the historical context that involves it is necessary. In 2015, IFMSA Brazil established the Publications and Research Support Division to assist local coordinators referring to scientific research. Due to the importance of this and the great demand of local coordinators for help, in 2017 Publications and Research became an official area in IFMSA Brazil with an official position on its Executive Board and a National Scientific Team, with regional assistants strategically distributed throughout the country to assist local committees.

In addition to this support network, in 2016 the Brazilian Medical Students (BMS) was created, the scientific magazine of the Brazilian NMO. Also, since the 50th IFMSA Brazil General Assembly, in 2016, the Scientific Moment was included in the event, with the presentation of scientific works developed by the local coordinators from activities related to SCOME, SCORA, SCOPH and SCORP, as well as Exchanges and Capacity Building. In addition, in 2018, IFMSA Brazil designed and organized the first edition of a national scientific congress, the Brazilian Medical Student Congress of Medical Abilities (COBHAM), which included oral presentations and posters.

With this, it was possible to show an increase in the number of scientific productions in the NMO. As can be seen in Chart 1, IFMSA Brazil had 28 articles approved in the MSI in 2015, increasing this number to 30 in the years 2016 and 2017, whereas it approved 37 in 2018. As early as 2019, only in the first of the year, the number of articles published was 33, evidencing an increase of four times more articles when compared with the first edition of 2015.

According to Table 1, in relation to BMS and the scientific events of IFMSA Brazil, with the officialisation of the axis in 2017, 229 papers were submitted to the scientific journal and scientific moment of the General Assemblies. While in 2018 this number increased by 18%, totaling 274. However, when added to the works submitted to COBHAM, which had its first edition in that year, there were 348, evidencing an increase of, in fact, 51% when compared to BMS and scientific events from the previous year. In 2019 the data so
far refer only to the II COBHAM and the scientific moment of the 55th AG, not accounting for the editions of BMS, nor the 56th AG that happens in the second half of the year, but there already sums up to 202 submitted papers. These data strengthen the importance of the encouragement, support and capacity of local coordinators in relation to publication and research as a predisposing factor in the increase of scientific productions. All this through a structured support network as well as publishing opportunities. Considering that the scientific works produced refer to the permanent committees of IFMSA Brazil and the axis of Capacity Building, it is possible to infer that the axis of Publications and Research also influences in the methodological rigor of the activities related to SCOME, SCORA, SCORP and SCOPH, as well as encourages the sharing of Exchange experiences and the importance of Capacity Building. Therefore, it presents significant importance not only in the academic development of the local coordinator, but also for IFMSA Brazil; and demonstrating a solid example of how to stimulate, qualify and organize the development of science for other NMOs and IFMSA as a whole.

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The transition from classroom to hospital can be one of the most challenging times for medical students. A new clerk must quickly navigate the hospital, while rapidly gaining technical proficiency. Despite the teaching of surgical skills in pre-clerkship curricula, new clerks are often lacking the confidence for an optimal surgical rotation.

In 2014, at Queen’s University in Canada, students acted to fill a self-identified want for more surgery exposure before clerkship, by designing a one-week, bootcamp style workshop covering skills commonly performed by clerks. It is called the Surgical Skills and Technique Elective Program (SSTEP). The following article summarizes how this program continues to engage in medical education, research, and innovation.

The week begins with an introduction on Operating Room (OR) etiquette. Scrub nurses teach pre-clerks how to scrub and keep a sterile field. Throughout the week, content ranges from IUD insertions for Gynecology, to POCUS for Emergency, to procedures for various surgical subspecialties (e.g. Incision and Drainage, Foley Catheters, and Chest Tubes). There are also sessions for practicing skills such as suturing and laparoscopic surgery. We decided to focus on skills typically performed (at least partially) by the clerk. These skills were identified by combining skills that are graduating requirements and a survey to the outgoing class. Further, we responded to feedback and refine the curriculum each year.

Two features were important in setting up and maintaining this workshop: (1) support from faculty and (2) evidence of success. From the beginning, SSTEP had two faculty supporters that advocated for the program. Since all instructors of SSTEP session (faculty and residents) are volunteers, a strong relationship with faculty members is necessary for success. Similarly, we strive to work with the curricula, not against it. We believe the surgical training at our school is adequate and prepares students for their rotations. SSTEP simply goes beyond and is an optional component for students who want more confidence. We openly communicate with the teaching staff to ensure we have consistency with our program and current medical education. Another way we established SSTEP as an ally in medical education is through the research component. The first SSTEP group showed using a cohort-based study that students felt more confident in their skills after completing our workshop. Karmali et al (2018) was the first group to publish their research for SSTEP and each directing group is responsible for a research project thereafter. In an academic climate, not only are publications good for demonstrating the legitimacy in your program, but they also serve as self-regulation.

This year, we have decided to add one more layer to SSTEP. We became an enrichment program officially recognized by the school of medicine. This program asks participants to complete an individual project of their choosing in addition to the bootcamp. Currently, projects include surveys on medical students’ exposure to the OR, the history of specific surgical techniques and a review of robotics in surgery. By allowing students the opportunity to engage with specific aspects of the program that interest them, this addition attracted new students and allowed for more personalized learnings.

As with any project, we have had our pitfalls. Importantly, medical students are in limbo between pre-clerkship and clerkship for only a short time. Further, as students enter clerkship and eventually residency, they become increasingly busy. As such, we struggled with...
the longevity of our program and following up with old projects. To combat this issue, we invite one first year student onto the SSTEP team every year. This student is tasked with networking with all the current and past research projects to ensure they keep progressing. Similarly, they sit on the executive team to learn how the program runs, and eventually that student and another selected later become the directors. This consistency allows for the continuation of SSTEP year after year.

Overall, it has been an honour to work on this student-driven initiative. Students who feel more confident feel more engaged and seek out more opportunities. We hope that by providing our students with an opportunity to solidify their skills before clerkship, we will lower anxiety and encourage more participation in their procedural-heavy rotations. As such, this program marries the two and explores an impactful way to engage with our education as future doctors and surgeons.


Curriculum Design: How Can I Contribute?

Pedro Anderson Ferreira Quirino
IFMSA Brazil

Currently, the requirements for health professionals, especially for physicians, are much broader than those that were previously contemplated in their formation: in addition to scientific and technical knowledge, they must also have a humanistic, critical and reflexive training, besides having the capacity to address prevention, promotion, recovery and rehabilitation in health, rather than just treating diseases. In this way, medical schools are increasingly adapting their undergraduate curricula to this new teaching model. This curriculum, which is an educational proposal of the medical school - that is responsible for its execution and evaluation -, is, in other words, a presentation of the intentions of the institution as to the doctor it wishes to form for society, and the goals it wants to achieve regarding this (1). The model that has been used in most medical schools is still based on the principles of the Flexner Reform - Report prepared in 1910 in the USA - privileging high-level scientific training and understanding the functioning of the human being as parties (2). From this, some studies began to see the consequences of this model, such as the replacement of generalist teams by specialized professionals in compartments of the human body (3).

With the over-specialization of medical education, movements against this form of education, such as the International Conference on Primary Health Care (Alma-Ata 1978) (4)
and the First World Conference on Medical Education (Edinburgh, 1988) (5), began to establish the points of a curricular reform in search of returning medical training for health promotion, with emphasis on the social function of the physician and in Primary Care. In Brazil, these movements had a reverberation with the creation of the Brazilian Unified Health System (SUS) and with the institution of the National Curricular Guidelines of the Graduation Course in Medicine (2001) (6). Thus, we turn to our present situation, which is the transition period from a medical training based on the biomedical model to one based on training a general practitioner with critical and reflexive capacities. In it, the student must become a qualified doctor to make critical analyses of the situations, transforming their knowledge into actions that can promote the integral health of the human being.

Thus, the medical curriculum has undergone several changes both in Brazil and in several other countries, so that we are in a period of transition in the midst of our medical training. Due to this transitional phase, students find themselves in a confrontation between the two teaching models in question. Unfortunately, most of these students are still strangers to the process, missing the opportunity to contribute to the building of their own curriculum that could generate a positive impact on their graduating class.

These students need to understand the creation and implementation of a curriculum. That is, they must be aware that such a curriculum must communicate with all aspects of the medical school in question, should be open to criticism and should be applicable in practice. In addition, it should be composed of elements such as teaching-learning strategies to be used, and should incorporate processes to evaluate their implementation (7).

To enable this new view of students about the medical curriculum, it is proposed to conduct training on the subject for students. The Local Committee of the IFMSA Brazil UPE-ST held one. We thought about doing it due to our university being considered relatively new, undergoing several curricular changes since its foundation, being indispensable the participation of the students in this process of curricular formation, collaborating in the construction of this curriculum adapted to the local reality.

The training in question reached the desired results, as it can be noted in positive comments like “Great presentation! I was able to understand the real meaning of Curriculum Design and felt moved to go after these changes to our university “.

In the opinion of the training facilitator, the event was able to instruct about Curriculum Design, being a viable alternative to approach the issue, making student interaction possible throughout the training. In addition, it was clear that the participants learned about the issue, since they proposed real problems and viable solutions for them, selecting potential allies and listing ways to achieve the proposed changes.

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Dear Exchange enthusiasts!

I am extremely glad to welcome you in this Exchanges corner! This part is dedicated to everyone willing to know more about professional exchanges and who want to develop better as future healthcare professional. Have you already travelled the world for a month of unforgettable experience or are you just packing the bags for the big step into the new life – this chapter is for you!

Here you will find out about the experiences of exchange people all around the world and read about different topics starting from diversity of Social Programs, Educational activities and ending up with Intercultural Learning, Global Health education and the importance of Academic Quality. You will not only get to know about what is shared by general members, but also have a chance to know a little bit more about the life of SCOPE International Team.

Try to be outcome oriented and while reading the articles think about what you can do in your Local Committee, National Member Organization or in the society surrounding you. We hope that you will find the experiences shared here very interesting and will get inspired by the ideas mentioned on these pages. In the end we always say that sharing is caring. Implement what you have learned about and share with us your experiences in the next issue of MSI and exchanges around the World will become slightly better.

Without further ado I am letting you to drown into the magnificent world of travelling and learning! Enjoy the reading!

Tatiana Zebrova
Director of the Standing Committee on Professional Exchange
As a couple, we had the opportunity to apply to IFMSA in order to complete our international exchange together in Chile. Kaitlin chose Chile because she was interested in understanding more about Mitch's background and the country his family were from, while Mitch was interested in experiencing medicine in a country he had visited often since his childhood. Doing an elective in a country where you do not speak the language always leads to some unease (1). We arrived on our first day to our host family, who spoke only Spanish. We were out of our element from the beginning and had to improvise in order to communicate. Simple things, like how the shower worked, when dinner was or what areas of town were safe to explore became difficult conversations due to the language barrier. A good translator app definitely went a long way!

We were placed in Coronel, a small mining town outside of Concepcion. In the 1970s, Coronel was a booming city with a rich mining industry. The mines have since closed, and Coronel is now one of the poorest cities in Chile (2). As a whole, Chile does not have a tuberculosis epidemic, but the Coronel region does (3). When planning an elective, remember that research on the whole country will not necessarily identify localized health crises. We arrived without our own N95 masks only to realize that in Coronel, this piece of equipment would be key in protecting ourselves from respiratory illnesses like tuberculosis. The hospital also operated “Poly-Clinics” which functioned similar to a walk-in where patients could come in and see whichever doctor was on-call for clinic that day. We learned from the other students on exchange with us that these “Poly-Clinics” are actually quite common outside of North America. Within these clinics, there were often many learners, plus a doctor seeing the patient. It definitely came as a shock to see patients so open to the high number of learners in the room. We quickly learned that Chilean patients were more than used to being examined by multiple different learners without introduction. We were often sent off to complete physicals without any means of translating our intentions to the patients, yet patients would lift their gown so we could check their legs for peripheral edema after listening to their heart sounds, even without prompting. It seemed strange and unfair for the patient to be examined so many times in a row, but no patient seemed to mind. They actually seemed very appreciative of the multiple opinions a medical team could provide in just one short visit.

We also had the opportunity to visit Mitch’s family in Chile. His dad was born in Chile, and many of his cousins still live there. His grandfather worked for the Chilean government in the Ministry of Health. When General Pinochet overthrew the government in 1973 and began to persecute government workers and their families, many feared for their lives and fled the country (4). Many of Mitch’s family members still work in healthcare and we were able to discuss the differences between our healthcare systems. Although many of our experiences in Coronel led us to believe that Chilean healthcare was quite different from Canada, our conversations with Mitch’s family made us realize things were really quite comparable. In larger centres, like Santiago, healthcare is extraordinarily similar. Hospitals function identically, with many departments, consulting services and state of the art equipment. What this highlighted more than anything was the disparity in healthcare quality depending on location. This made us
think of the similar issues Canada faces. In our nation’s Indigenous communities and the north, we lack in many aspects of healthcare including access to specialists or gold standard diagnostic testing, much like Coronel (5). Our experiences reminded us that the issues we face here in our home country of Canada are universal.

Overall our elective in Chile was an extremely eye-opening experience. In the Chilean healthcare system, paternalistic practice remains common in stark contrast to the beneficence principles we strive to uphold here in Canada. There are clear disparities in the quality of healthcare based on location. However, Chile also practices modern, evidence-based medicine with state-of-the-art technology. It is a medical system in flux, and it highlights many of the issues we see in our own medical system as well. Moreover, it left us both interested in returning to see how the Chilean healthcare system continues to develop and, more of the beautiful landscape the country is famous for.

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Each year, more than 15,000 medical students embark a journey to explore health care delivery and health systems in different cultural and social settings. This is achieved by providing a network of locally and internationally active students that globally facilitate access to research and clinical exchange projects, and such programs usually last four weeks. So most people imagining the exchange people while dealing with finances like working in wall street and dealing with a lot of stock but in this article, we will try to provide you with some insights on how it works.

The finances in exchanges are quite a logical thing, we can generally divide the principles into two types:

The first type is Bilateral contracts: The student A pays the fees of their exchange to their NMO B and the student B pays the fee of their exchange to their NMO B, and those fees are used to cover the incoming students living in the accepting NMOs during a month of staying (so, student’s A in country B and student’s B in country A).

The second type is Unilateral contracts: The student A pays the money to the hosting NMO B directly, the unilateral incoming fees may be different form the bilateral fees for your outgoings and there is a logic behind that.

But why are the fees different in Bilateral contract in each NMO? The answer is simple - because the outgoing student’s (student A) fee is used to cover the expenses of the incoming student (student B) arriving to NMO A and going to stay there for a month. We all know that economic situations in different countries vary a lot. So this system is created specifically for increasing the accessibility of exchanges, for giving the students of different countries the opportunity to see the health systems of the countries they probably wouldn’t afford themselves to attend if not within that system.

The IFMSA exchanges fees are used to cover the following expenses of the students. As mentioned in SCOPE regulations the hosting NMO must provide students with the following:

a. Provide lodging with at least one bed per student, a bathroom, lighting and electricity.
b. Provide boarding, with at least 1 meal (lunch/dinner) per working day or its equivalent amount of money.
c. Provide a professional clerkship with daily guidance whereby the student will work under supervision.
d. Provide basic means of comfort relative to the conditions of living in the hosting country including hygiene, heating.
e. Ensure the safety of exchange students (safe neighborhood for lodging facility, providing individual keys and locks).

One of our aims is the financial sustainability in exchanges which means the ability to be financially agile over the long term. And it’s important to make sure that the expenses do not exceed incomes as it can affect both the national and local level in the NMO. The proper financial management will ensure the continuity of the exchange program and help you avoid financial hardship.

To achieve sustainability, a yearly budget plan can help you to keep track of your incomes and expenses in your exchange program. The aim of good financial management on the short term is to break-even at the end of the period. As for the
long term, it will help you to reach sustainability.

In the end, we aim to develop both culturally sensitive students and skilled researchers intent on shaping the world of science in the upcoming future. Our exchanges programs are key promoters of intercultural understanding and cooperation amongst medical students and health professionals, which is much needed in our globalized world as IFMSA believes.

Make sure to contact the SCOPE IT in case you feel the need of support in such an uneasy topic.

SCOPE INITIATIVES: FROM IDEA TO REALITY

Mariana Vitória Soares Martins dos Santos, Erick Dupont
IFMSA-Brazil

More than a simple Standing Committee, SCOPE has promoting lifetime experiences and making a revolution in thousands of medical students lives since 1951. Year after year, our exchanges get more professional due to the restless effort of LEOs, NEOs, SCOPE IT and SCOPE-D, those who faithfully safeguard SCOPE Regulations. But in this game with strict rules, is there any place for creative thinking?

The answer is easy and we can summarize it in a few words: SCOPE Initiatives. Five different innovative approaches that widen the horizon of our exchanges: Exchange in Multiple Departments (EMD), Longer Duration Exchanges, Trilateral Exchanges, IFMSA-IADS Exchanges, SCOPE-SCORE Exchanges. Certainly all of them sounds interesting for any NEO, but they also have specific rules and sometimes seems out of reach, because it’s something new. So would it be possible to leave our comfort zone and implement any of these initiatives? IFMSA Brazil tested it and we can say SCOPE Initiatives are perfectly applicable!

Quality of exchanges is an atemporal concern of IFMSA Brazil LEOs and NEOs. As a result, there are always lots of discussions regarding
the accessibility of our exchanges, resulting in a brainstorming with suggestions of LEOs, students and tutors. Due to this debate and to the requests, we recognized the demand to provide for both outgoings and incomings a new experience and then choose to volunteer our NMO to the EMD and Longer Duration Exchanges test phases.

It was a brave new world, so we decided to follow a long-term plan to manage it, which was based in a few steps:

Scenario Analysis
Indeed SCOPE initiatives are variations of our usual exchanges. That's why we decided to study our solid foundation of more than 3000 spots all over Brazil and map stakeholders. Thus it was possible to assess the possibilities of combinations of departments and potential LCs that could adapt vacancies in consecutive months for a Longer Duration Exchange spot.

OLM and Trainings
We planned our National Exchanges OLM Calendar and chose two occasions to explain to ours LEOs the idea, main rules, the perfect tutor, how to combine departments and how to fullfill the internship form. Besides, we trained our National Exchange Team to support all the LEOs and answer all the questions during the process.

Internship Forms
It could be a struggle due to the paperwork. In fact, NEOs and LEOs tend to move backwards when there's bureaucracy involved, even if it's for their safety. Nevertheless, we avoided this potential problem by adapting IFMSA Brazil standard internship form and keeping it simple. Indeed, to settle the spots was quite easy, cause both tutors and LEOs were familiarized to our usual manner of organizing it and also fulfilled all the required topics demanded by the IFMSA EMD/Longer Duration Exchanges Internship Forms.

Incentive Program
In order to give an extra motivation, our LEOs voted during our General Assembly for rewarding the LCs that decide to take part of SCOPE Initiatives. So Erick (NEO IN) informs me, Mariana (NEO OUT), which LCs provide specific spots for EMD and Longer Duration Exchanges. Then, by the end of our outgoing selection process- a point based system, we increase the final score of all students enrolled to these LCs involved with SCOPE Initiatives.

This was a brief summary of months working on the backstage with our National Exchange Team to make SCOPE Initiatives happen and our main goal with this experience report is invite you, LEO or NEO, to implement SCOPE Initiatives in your NMO. As co-NEOs, we strongly believe in our mission of moving people across borders in order to reinvent SCOPE to reach out to different students all over the world. Lastly, let’s keep in our mind Socrates’ words of wisdom: “the secret of change is to focus all of your energy not on fighting the old, but on building the new".
Aware of the impact of an international exchange on one's academic achievements and personal growth – such as improvement of communication and clinical skills, insights on future career choice, self-confidence and learning experiences with different health care systems –, IFMSA Brazil and its Executive Board is already thinking abroad and beyond when it comes to improving academic quality and student's experiences on exchange programs: the National Exchange Team (NET), created in 2012 and with its actions regimented and supported by the Federation's Internal Regiment, works with the National Exchanges Officers for both Professional and Research Exchange to guarantee that IFMSA's exchange programs are medical leadership experiences.

As a support division for the National Exchange Officers, our NET is compound by Local Exchange Officers and Local Officers on Research Exchange and its main goal is to enable local officers on the many affairs that contribute to improve academic quality on exchange programs -basic matters such as Pre-Departure and Upon Arriving Trainings and more advanced topics such as preparing and sensitizing students on a intercultural intelligence aspect to maximize his or hers learning experiences on an exchange, bringing awareness about variants on health care systems and local epidemiology and developing problem solving competences taking cultural differences into consideration-, using, for that purpose, it's Capacity Building, Administrative and leadership skills.

Besides the main and universal affairs concerning our exchange program and recognizing Brazil's continental dimension, which implies in a big amount of around 97 LCs SCOPE and SCORE active, it became necessary to adapt our support division teams to more specific demands coming from distinct realities around the country – so the regionalization became real. From North to South, Northwest to Southwest, it was always from common knowledge on IFMSA Brazil that Local Committees had different demands and expectations biased by their geographic location and, taking that into account, eight administrative units were created to customize and adapt, beyond other things, capacity building initiatives that boost LCs' growth. On National Exchange Team, that implied a new division of roles, separated by regions – one per administrative unit, besides the General Assistant and BEACH Project Coordinators – and, consequently, a new team building dynamics.

While the BEACH Project (Brazilian Exchange on Assistance and Care Hospitality) Coordinators make it possible for 200 incomings or more to have unique experiences on selected Brazilian cities during Summer months and the General Assistant works within an administrative approach by organizing the assignments' distribution, paying attention to what concerns team building and how the members are dealing with specific tasks and deadlines, alongside with helping the National Officers on more specific and urgent matters, the Regional Assistants work on a demand-based dynamic. Working as an Assistant for a specific group of people, whether is a team or individuals local officers from a common region, is a two-way path since is a prominent role that both allows and requires the development of leadership skills on both organizational and exchange matters. Knowing the context and peculiarities of a particular region makes it possible for the capacity building initiatives to be more resourceful and, therefore, more accurate to local officers' needs. Besides, on smaller work units, it is attainable for exchange team members to work with other support divisions on what concerns Reproductive and
Sexual Health, Public Health, Human Rights and Peace, Medical Education and Publication and Research to maximize international exchanges for both outgoings and incomings around the world.

Therefore, assuming that international exchange programs expose students not only to different cultures, health care systems and exotic diseases, but also to the need to improve leadership, communication and clinical skills, IFMSA Brazil recognizes the importance of constant academic quality initiatives and, through the National Exchange Team, creates tools to maximize both outgoings and incomings experiences. Furthermore, considering the new standards for high-quality medical care require skills beyond clinical knowledge – such as proactivity, problem solving, feedback receiving and multicentered approach –, through team building, handover habilites, organizational skills and sharing leadership, the members of our support division for exchange affairs are inserted in a fruitful environment to acquire abilities that will highlight and improve their medical practice. Apart from all personal and professional individual and collective gains and communication flows, this context allows LEOs, LOREs, NET, NEOs and NOREs to surpass work boundaries and interact not only as workmates, but as a true clan of exchange passionates.

References:
Warren OJ, Carnall RMEDical leadership: why it’s important, what is required, and how we develop it, Postgraduate Medical Journal 2011;87:27-32.
Everyone experiences mixed emotions of excitement and frustration while visiting a new foreign country, but what if I told you that you can have and feel what every traveller faces while you are still in your country. It is what I like to call ‘The Indoor Traveller’ or we all know it as ‘Contact Person’.

Being a contact person is one of the greatest experiences I have ever tried. You think your life changed after being an IFMSA member, but change never stops at that moment. It will continuously grow and thrive if you are an exchanger especially if you are a contact person. The journey starts when you are informed about the incoming students arriving at your local committee, you start to imagine their characters, their cultures, and their personalities. Millions of questions will arise out of nowhere blowing your mind. Until that moment when expectations turn into reality; until your doubts are interrupted and the walls fall down with the first handshake. You can sense the conflicting feelings of dash and hesitation during that moment as they also, in turn, have their doubts too.

Things start slowly with some caution by simple questions, questions lead to others which lead to a conversation, then similar interests start to pop up until a common ground is established in both sides. For them, it is some sort of relief. Things start to be easier a couple of days later when they settle down. We start to hang out around the city showing both sides of it; the modern and the historical. My favourite part is picking up ‘our place’. Maybe it is a café, club or restaurant but until today, every time I pass by one of those; memories reanimate like it was yesterday.

The social program is a whole different story, they aren’t the only ones who discover Egypt, but I am too. We share new experiences together and with them, I start to learn about my homeland from a different angle. Their keen to know about the history of my country makes me realize many things I would never know by myself. People around start to see us as a family which is a gladness for all of us.

Days and nights pass and gradually they become part of my daily routine, no day passes without hanging out, playing, talking and sharing traditional food or listening to some random traditional music. Some sort of familial bond starts to settle by sharing stories, experiences, dreams and fears, and you will find out that we are all the same person but from different lands. And the journey has come to an end, flipping the page of another adventure. Surprisingly, the situation is not different from the beginning. Contradictory emotions of happiness that they are going home and sadness to be parted from what they call a second home. My life is getting back to my previous routine but never the same. I have become more understanding, more modest, more willing to live and with a wider perspective on life. Part of the new friends is still here and part of Egypt is travelling with them too. The nice part is when they still keep in touch with you sharing news, checking on you or even congratulating you on your occasions.
Being a contact person is not confined to some points you get in your membership system or job description you abide with, it is a second chance for another life-changing experience that you don’t want to miss. The beauty of being a contact person is that you get to know not one but many countries without stepping a foot out of yours. Every incoming student is a visiting ticket for his/her country and you will be amazed by how wonderful it feels when each one talks about his/her country and you feel you are already there. Not to mention the experience you get, international friendships and the joy of the whole process. Tim Cahill once said “A journey is measured in friends rather than miles” That’s why I’m proud of all my journeys that I went on as a happy indoor traveller.
MENTAL HEALTH IN EXCHANGES

Gabriela Dias Silva Dutra Macedo
IFMSA-Brazil

Mental Health is a topic that has grown and has many discussions started in the last years. This subject is part of the definition of Health, advocated by the World Health Organization (WHO) as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Still accordingly to the WHO, mental health is defined as “a state of well-being in which every individual realizes their own potential, can cope with the normal stresses of life, work productively, and is able to make a contribution to their community”. (1)

Having that said, Mental health helps determine how they handle stress, relate to others, and make choices. (2)

The life of medical students, especially Exchange Officers, might get very stressful. A lot of documents to be sent, deadlines to be fulfilled, culture and diversity to be respected (and taught to students, especially via Pre Departure Trainings (PDT) and Upon Arrival Trainings (UAT), which can also be a source of stress during planning and performing it). How does it affect the mental health of our National Exchange Officers (NEOs)?

During this term, the SCOPE International Team has implemented the Mental Health Watch. Short forms for the NEOs to fill monthly (or when they feel it’s needed to) on voluntary basis. The answers are only available for the SCOPE Director and the Regional Assistant of the corresponding Region. For this article, the names, NMOs and additional comments were excluded even for the analysis for the sake of privacy.

From December 20th 2018 until May 23rd 2019, 124 answers were collected from NEOs of all Regions. The average level of stress is estimated as 6,66; productivity is 6,90; feeling in control over the IFMSA Work is 6,75 and SCOPE Motivation is 7,26 (all ranked from 1 till 10).

The biggest causes of stress reported were: IFMSA related (cancellations, complaints, disorganizations from previous terms, short deadlines, workload, not having a proper handover, database issues, NMO/LC tensions, feeling responsible for student’s happiness and well-being, being only 1 NEO), academic (university duties, exams, work, being far away from home), personal (family, relationships, lack of support, time management, loneliness, money) and sickness. One NEO even wrote “Van Gogh has the perfect phrase to define this moment: I put my heart and my soul into my work, and have lost my mind in the process”.

What the NEOs reported to have helped them during those difficulties were: sleeping, watching Netflix, hanging out with friends, family or partner, doing sports, enjoying the pets, listening to music or playing instruments, having faith, eating good food, reading books, shutting of the phone, taking a break/walk/warm bath, attending the General Assembly, talking with the former NEOs, organization and time management, procrastinating. 10 times it was said “nothing helped”.

The most reported symptoms were: tiredness (66,12%), anxiety (44,35%), trouble sleeping or sleeping too much (41,12%), loss of energy or increased fatigue (40,32%), changes in appetite (20,16%), a prolonged feeling of sadness (19,35%), feeling worthless or guilty (18,54%), burnout (16,93%), loss of interest or pleasure in activities once enjoyed (15,32%), thoughts of death or suicide (2,41%). Despite all that, 64,5% of the answers claimed
that they still were very productive (answers from 7 to 10 in a scale of 1 to 10) and 60.48% felt in control of the work. Regarding SCOPE motivation, 69.35% felt motivated even with personal or IFMSA issues. 15 times was asked for a Mental Health Watch and 7 times to have an online meeting as a stress reliever. What has been done to improve the situation? So far the job is mostly done by the Regional Assistants. If a person reveals their name, the RA contacts them and tries to provide all types of possible support needed. Moreover, specific sessions during the IFMSA International events are organized (check the outcomes here), encouraging and stimulating NEO Buddies System and just generally to be as supportive as possible to our NEOs.

To summarize, for the future, the SCOPE IT should keep improving the Mental Health Watch and creating more SWGs focusing on developing materials and solutions, as well as on how to decrease the level of stress among NEOs. Furthermore, this discussion should never stop. Increase and raise awareness within the NMOs, NEOs, LEOs and Exchange students. Mental Health is the key for improving health, productivity and self care in the Federation and in the world.

References
When medical students think about Brazilian medicine, they have different ideas that come into their minds about it. But few are those who imagine that acupuncture has become one of the greatest methods of treatment in the Brazilian public health system.

Acupuncture is a therapy belonging to Traditional Chinese Medicine, a medicine with different foundations and characteristics of biomedicine, encompassing a series of other practices such as meditation, phytotherapy, massages, exercises and diet. Among these practices, Acupuncture is the one that has increased the number of practitioners and inserted in the Brazilian Unified Health System as a form of official and recognized therapy.

Acupuncture originated in China, with records of 5,000 BC, surviving all these centuries and reaching the West, based on a more individual-oriented medicine than on pathology, analyzing various aspects such as emotions, interpersonal relationships, eating, which may influence their internal balance, causing their illness.

In 2002, the WHO gathered a series of scientific articles, which show the efficacy and safety of the use of this technique, recommending its use in isolation or as a coadjuvant in the treatment of various health problems. In the West, it is mainly used for the treatment of pain, obtaining similar analgesia results when compared with the use of opioid drugs.

The Polydoro Ernani de São Tiago University Hospital in Florianopolis, Santa Catarina, Brazil is one of the references in Plastic Surgery and Acupuncture, and often these specialties are intersected. Many are patients with chronic pain, phantom limb after amputation who are attended by the hospital acupuncture service.

Given this Brazilian reality, we decided to organize a Workshop on acupuncture for the incomings that were making their exchanges in Plastic Surgery so that they could have the experience of trying not only traditional medicines but also an alternative medicine.

Medical students Chiara Barbieri and Raffaele D. Cerchione, both from Italy, participated in the Workshop mediated by MD Ari Ojeda Ocampo More, doctor of the Integrative Medicine and Acupuncture Service of the University Hospital, member of the Translational Research Group in Acupuncture and Preceptor of the Medical Residence in Acupuncture of the University Hospital.

The workshop was organized at the Acupuncture Clinic of Polydoro Ernani de São Tiago University Hospital. Some theoretical aspects were taught and after that students could perform basic acupuncture points, the most used and simpler to use by general practitioners. The students could talk with the patients, understand their disease and ask to them what brought them to look for acupuncture. Most of the patients had chronic pain, most of them complained of backpain and had used already lot of drugs and practiced physiotherapy without any results. As the patients go to Clinic once per week, the students could experience the acute results on the use of Acupuncture. Was also thought to the students to use on themselves the points to relieve stress and anxiety, important points for Medical Students.

The incomings mentioned that it was a wonderful experience that they would never expect to have in Brazil or during their academic studies, that this experience opened their minds about alternative medicine and how it can be...
used as coadjuvant in the treatment of different diseases.
The workshop on Acupuncture achieved its objectives of presenting and teaching the basics in acupuncture for the incomings that are making the exchange in our committee, in addition to demonstrating that Brazil has a great network of attention in alternative medicine included in the Brazilian public Unified Health System.

References:

Social Accountable Exchanges: why and how?

Giorgia Soldà
SISM Italy

Social Accountability (SA) is a very wide topic which have been discussed and implemented in SCOPE activities in the past few years following the more general trend undertaken by IFMSA. Since the beginning, SCOPE saw the relevance of it and deemed necessary to implement it in the way we organize and conceive Exchanges.

The link between SA and exchanges is essential and raising awareness about this is fundamental to avoid the risk for exchanges to become simple holidays or personal experiences.

While speaking about SA the first thing to consider is the community, the society we are referring to. So the first questions we, as SCOPE IT, asked ourselves was: why does society need exchanges? Our opinion is the following: society needs exchanges to have more culturally aware doctors. The society now is “global” and therefore in the patients’ community they might serve there are going to be a lot of patients from different backgrounds, both geographically and culturally. Therefore now the society needs doctors who are able to relate to all the different issues they might encounter. Considering this perspective, exchanges are an incredible opportunity to grow such skills and competencies and create culturally sensitive doctors, delivering relevant and all-inclusive services to their transforming community.

But, even if an exchange itself is a great
experience to get to know more about the hosting country, we believe that the strength of our exchanges is to have local committees (LC) that can give to the exchangees more insights and a better understanding of the peculiarities of their local reality. Furthermore, learning how to bring all the knowledge and skills learned during their exchanges back to their own country, city, university, health system on one side is what makes exchanges accountable also to the sending community.

The tools that can be used by both sending and hosting LC to organize more social accountable exchanges are a lot. First of all we should give students the opportunity to share their personal experiences with the LEOs and LOREs and other exchange students: Pre-departure Trainings and Post-exchange debriefing on one side and Upon Arrival Training and Educational Activities on the other to provide students with knowledge and tools that can help them making the most out of their exchanges and transform it into a SA experience. This way exchangees have the chance to acquire specific tools to use during the exchange, internalize more what they learnt and give it specific meaning and use.

We are aware that organizing exchanges in this way could be more energy taking and the obstacles that Local and National officers might encounter while transitioning to this concept are quite a lot. The very first one is the motivation of the students, their awareness about this topics and type of approach. This derives also from the Officers' one: if they are not aware about how an exchange should be organized, then they don’t do it properly and therefore they promote a “wrong” idea of exchanges - only party and fun - neglecting all the cultural, ethical and social aspects of it.

The second one is that organizing socially accountable exchanges can take quite some time: one thing is organizing “only” the high academic quality internship in the hospital and the lodging and boarding, and a good social program; if we add also high quality trainings, educational activities and debriefs the workload doubles, and since by many it is deemed less essential to the exchange experience and students generally don’t demand it, it is less prioritized.

There are solutions though that can solve these problems, starting with recruiting more people working on the exchange program, more collaboration with the other Standing Committees and more support from the Executive Boards.

International Teams feel also responsible for this and work a lot to promote a 360° education approach of the exchange officers through campaigns, webinars, manuals, trainings, sessions, while also implementing the collaboration with all the other Standing Committees.

We believe that if an Exchange Program is built this way it can really become a transformative learning experience (not only logistics and bureaucracy) more focused on its SA aspects; moreover officers efforts would be well “re-paid” (the impact of their work would be much bigger), not to mention that probably also the recognition process and the Academic Quality of the entire project would benefit and therefore also the contact with externals (we would have more to offer and be more credible).

To know more, check out our webinar [ExWeek19]
Are exchanges socially accountable?
Dear orange-hearted public health enthusiasts,

I am very happy to share with you the 40th edition of our MSI and it is my greatest pleasure to welcome you to the Standing Committee on Public Health section.

In the past few years, I have had the amazing opportunity and the incredible privilege of discovering so many activities that are being organized worldwide, as well as seeing the orange threads that bring us together to learn, explore, build skills, and share ideas to address different public and global health issues. It is heartwarming to see all the wonderful SCOPHeroes making an impact in the world, one activity at a time.

What makes being a SCOPHero even more special is that international collaboration is always within reach. Watching the outstanding efforts of our members taking the unique chance to develop as healthcare students and as future healthcare professionals by building capacity, taking part in community-based and peer-to-peer learning, managing activities and actively advocating for their beliefs, is immensely inspiring.

In this section, you will have the opportunity to gain much insight into the lives of members on this amazing orange Standing Committee.

The MSI is like a mirror, reflecting our work and offering us a little glimpse into the captivating endeavours of SCOPHeroes and their various public health initiatives. Through this looking glass, we are able to share the best practices, growth in knowledge, and experience as individuals; this will ultimately prepare us to face global health issues together.

I would like to express my gratitude to the authors of the contributions found on the following pages - your efforts represent the spirit of SCOPH and it is wonderful to see how the orange energy translates into words.

I also invite the readers to pay close attention to the stories of SCOPHeroes who contributed towards our vision and lived the reality of “think globally, act locally.” The articles you are about to read reflect a wide range of different activities and experiences from our members around the world.

Wishing everyone an inspiring read and lots of enjoyment perusing these following pages!

Lots and lots of orange hugs,
Katja

On behalf of the SCOPH International Team: Tarek, Anna, Omnia, Sarah, Michelle, Natasha, Ghaidaa, Blanca, Vicky, Teddy and Charlotte
Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis, its transmission occurs through the airways. Poorly ventilated and closed environments favor contagion. The treatment of tuberculosis is done under a Directly Observed Treatment (DOT) regime. Leprosy is a chronic disease that has the etiological agent Mycobacterium leprae, transmitted by the upper airways, resulting from prolonged living. In Caxias-MA (2017), the SINAN (Notification of Invalidity Information System) recorded 353 cases of leprosy and 61 cases of tuberculosis. Looking at epidemiological data, and considering that these two diseases are of compulsory notification, it is possible to infer that the infectious risk is imminent and the outbreaks need to be properly avoided. Thus, preventing, detecting and raising awareness among the population of Caxias is fundamental to reduce the incidence of these diseases.

The project “Active Search for Tuberculosis and Leprosy” was carried out on May 5, 2018, by medical students from UEMA (State University of Maranhão), in partnership with IFMSA (International Federation of Medical Student Associations) and UBS de Baixinha, Caxias-MA. Prior to its execution, IFMSA provided training so students can detect suspected cases of leprosy and tuberculosis, and pass on guidelines to the community. In the training, classes were given regarding the pathophysiological aspects and the epidemiology of leprosy and tuberculosis.

For the “active search” itself, students were divided into three groups, composed by a health agent from UBS and eight students.

They were then directed to different areas of the neighborhood to conduct household surveys about possible symptoms. When a suspicion was confirmed, patients will be given a medical referral in order to confirm the diagnosis. In addition, health information like the pathways of disease transmission was provided.

The “active search” was an effective measure to analyze the health conditions of the neighborhood and confirm the epidemiology of the municipality for the bacterioses. In addition to reporting three suspected cases - two tuberculosis and one leprosy - we held a dialogue with people who were being treated or had already completed treatment. We observed an absence of information regarding the infectious power of the diseases. Students who participated in this activity were able to extend their academic knowledge to the service of the Caxian population. Also, the effectiveness and data of the treatment were released as a form of encouragement and awareness.

It is clear, therefore, that the community must be properly informed about the risks of recurrent diseases in the municipality. Also, it is confirmed that encouraging proper treatment is imperative for the prevention of further contamination. In this sense, the realization of campaigns and conversational wheels are positive activities for increasing awareness and health literacy of the community. Furthermore, it was noted that this activity provided important personal and academic growth for the participating students, especially in the health area, since the contact with the community was an enriching experience. Thus, activities such as these should be encouraged in the IFMSA committees.
Cardiovascular diseases (CVD), according to the Pan American Health Organization (PAHO), are the leading cause of death in the world. This is even more problematic when it comes to street people, as the poor hygiene standards, quality of life, and social exclusion culminate to give rise to significant increases in the risk of disease development.

The “Hearts for the Homeless” project originated from the United States. It aims to reduce the risk of CVDs in street people by identifying individuals with high blood pressure. The data collected in each host city is sent to regional representatives and stored at national level. With the analytical outcomes of the data, we hope to make a comparison with the population residing in several Brazilian cities and states. In addition, volunteers are expected to experience personal growth and gain an enhanced understanding of this multifaceted homeless population that is often neglected.

In the state of Santa Catarina, the host city is Blumenau, represented by the IFMSA BRAZIL FURB Committee. We promote actions in three different institutions, which enables comprehensive attention to people living on the streets. They are: CEFAC (center of faith, love and charity), POP Center (city council for the care of this population) and Shalom Baptist Church. In these institutions, individuals without conventional housing are registered, and we create dialogues about their current situation, needs and difficulties, and we give advice accordingly. In these places, individuals are given the space to maintain personal hygiene, as we provide bathing facilities and clean clothing.

Health-Disease Process in The Context of Social Exclusion: Experience of Medical Students with People in Street Situation

Beatriz Pereira Lopes, Angela Theresa Zuffo Yab rude, Priscila Pegoretti, Alice Tabita Lemes Fernandes da Silva e Karine Emanuele Tres
IFMSA-Brazil

References:


Furthermore, 2 meals are provided (one on site and one for take away). Their blood pressure is taken 3 times a week, between the time of registration and bathing, by a rotation of trained student volunteer from years 1 to 6.

This project aims beyond the analysis of blood pressure, create statistics and promote cardiovascular health. It also encourages empathy from medical students. Observing the adversities the homeless face also provide opportunities for reflection and personal growth of volunteers.

With regards to the data collected, we concluded that there are changes in blood pressure due to poor living conditions, as supported by our literature reviews. These reviews also highlighted problems of mental health and infectious diseases due to the lack of hygiene and personal care. By participating in this project, it was possible to observe the difficulties faced by this neglected population. We could also observe that experiences in the streets may stimulate alcohol or drug addictions, further aggravating both physical and psychological health problems experienced.

Therefore, IFMSA Brazil FURB’s initiative to register the local committee in this project, whose international character has provided rewarding and enriching experiences, has been extremely successful on the whole. Having facilitated dialogues between medical student, and a social minority generally not prioritised by the Health System, it is our hope that this exchange will prompt future physicians to continue fighting for the rights of neglected populations through small local acts, which may have global consequences.

References:


“Ra7t Lbal” or “Mind peace” : Mental Health matters

Ihsane ZAHIRI
IFMSA-Morocco

“The new black, an expression that alludes to a trendy world, a newfangled one. Let me say that darkness is my new black. Darkness, as bleak as black, is consuming me. My life is fading away, the black is losing its shades and I’m losing myself. Let me rest in peace, or not. Goodbye.” Had said a depressed person before her veins teared up.

*      *      *

“No, something is going wrong! I’m sure! My son isn’t okay. Something bad is happening at school. I will call the director. My son is not okay... I am sure.” An anxious mom among millions, is dying day after day.

*      *      *

“One try was enough to ruin my life. Just a bit more, I said. That one try of a liquid that became my favorite perfume. That one try of that powder. That one try of lottery and so many other tries. All it needs is a first try that sticks to your skin. A skin that is no more mine. I’m a stranger who colonized my old self.” Confessed an addict who got conscious, finally.

Depression, anxiety, addiction and schizophrenia are the diseases that AEM-M, LC from IFMSA-Morocco, chose to promote. Thus, four short films had been realized, acted and refined by our SCOPHeroes to raise awareness.

“Ra7t Lbal” or “Mind Peace”, born two years ago, is a project that broke the barriers between medical students and the general population. A project where no stethoscope is needed. A project that requires few minutes of watching, attention but also SCOPHeroes’ determination. To assure a credibility to the delivered facts, the scenarios had been approved by professor Asri, head of psychiatry department, Ibn Nafis hospital.

A question that may emerge: what makes this project peerless?
- The language : we used Moroccan Dialect to touch all the generations, social classes and ideologies.
- Its accessibility : the videos last from 4 to 8 minutes and are available on the LC’s youtube channel: AEM Marrakech. Hence, you can watch it on your way home, show it to your colleague during the break or to your illiterate neighbor.
- The astonishing results : the views on youtube assert that the content aroused the target’s consciousness.
- It contributes to the medical studies’ academic quality : the videos have been used by some professors in moroccan medical universities to teach psychiatry in a concrete way.

Knowing that mental health is a permanent issue including a variety of diseases, we assured a continuity. After two years, the second edition of “Ra7t Lbal” showed up in March 27th, 2019, with a new video about addiction. Along these lines, our SCOPHeroes are looking forward publishing more short films while preserving the awaited quality.

Nowadays, despite the prosperity that adorns all domaines, mental health is still claiming its vital right, people’s interest. A mental trouble is mostly seen as a taboo, the dark mysterious side is feared and the person is perceived as a demon instead of a
usual sick human being. A demon who fears himself, others and the world. These stereotypes are driving the current situation to unbearable outcomes.

Armed by our knowledge and perseverance, we, medical students, can purge the weather, incinerate the prejudices and smash others’ burdens.

“without mental health there can be no true physical health”, stated Dr Brock Chisholm, the first Director-General of the World Health Organization (WHO).

In this optic, in parallel with its strategy, IFMSA-Morocco established national priorities for each standing committee. Concerning the Standing Committee On Public Health, the national priorities wisely chosen are NCDs, CDs and mental health.

Mental illness is more than a state of mind! Mental health matters! Let’s talk!
Who are you?
What defines you?
A prisoner of your own war
An affliction you're true to.

An entrapped slave to virtuality.
A Hypocrite of your fraternity.
An absolute question mark to the society
A morgue sees your loyalty

Little John was young, less than 1 year since his admission to an esteemed medical college. He lives in a college dorm now. He wheeled in anguish in his first step alone when his parents left him there.

Conversations today have changed a little. No more tears. No more I miss yous. This time he packed his bag all by himself. His absolutely untouched books, his crisply ironed clothes, some food for his friends and in between his pyjamas, he sneaked his lighter quickly before maa could come. Told you, little John was little no more. This time as he took his first step to a catastrophical life, ironically he let out a wide smile.

Medicine is a dream easy to harbour, incredible to believe and difficult to accomplish.

I'd desist from emphasising how your lighter burns your body to ashes along with “your spirit”. As a medical student you’re as much into the ocean as the others. Just that you
dumbfoundedly choose to drown despite knowing how to swim.

Tobacco kills a whooping 8 million people every year. 7 million are tobacco loyalists while remaining 1.2 million are the tobacco loyalist’s loyalists.¹ Without exaggeration, exposing the gravity of the situation, tobacco causes 1 death every 5 seconds.² Hence as you read this sentence, a smoker has died. Thinking a little deeper about the numbers, there you are another one bites the dust!

The world astonishingly produces 6.5 trillion cigarettes a year which makes it about (wipe your eyes twice if you don’t believe me) 18 billion a day!² China, India and Brazil remain the highest producers.² Hence, it remains countries with maximum black lungs, yellow teeth and ashed bodies.

Through dissection, death and distress we see reality of life (read death) a little more than others, we know cigarette smoking causes most number of preventable deaths in the world. There is nothing called safe smoking. Any kind of inhalation can cause emphysema, chronic bronchitis and eventually lung cancer. A tarred lung cannot help another lung breathe. Destroying every part of your body eventually, You cannot be a saviour if you cannot save yourself. It takes a gesture to say no. It takes determination to affirm your will.

Medicine is not about learning complex names, flaunting your white coat, 8 mark LAQ and long hours at the OT. It’s about the faith people Instil in you, without personally knowing you.

It’s about a father entrusting upon you the life of his only breadwinning dying son. It’s about a mother choosing you to hold her newborn infant before she does. It’s about the old man hoping for an extension and believing you can! It’s

Ashed Doctors

Sahiba Maniar
MSAI India

before she does. It’s about the old man hoping for an extension and believing you can! It’s about this beatific status that equates you with God. It’s about making you the messiah of emotions in this profession of practicality.

Addictions begin with pleasure. The pleasure of acceptance from your peers. The pleasure you seek from it’s temporary high. Pleasure of feeling like an apparent grown up. It’s the kind of pleasure a thirsty camel gets looking at the mirage in the scorching summer desert. We are all looking for our tiny space, a hole, a roof that shelters us from the horrendous reality of this world.

As medical students we must remember we aren’t the link between the patient and the grave, but the never ending link between the patient and his renewed life. We stand as a reflection of this society. Let’s not be the hazy tinted glass.

The medical fraternity needs to be a mirror, reflecting the honest perfection. Let’s be the doctors the world needs. Let’s swear against tobacco.

The medical degree you will have is priceless. I’ve seen people aspire to be who you are. I’ve seen rejections leading them to dejections. I’ve seen them strive back and celebrate the life offered. You are the fortunate one. You are the chosen one. Be an inspiration to their aspirations else, your two faced dangerous friend will thrust a sword, straight on your chest, and gone will be your lungs forever.

The lighter has burnt your soul more than your cig
Decaying your dreams all small and big
Clutching your spirit, you're unaware about the misery
It’s time you kick it out, it’s time you break free.

References:
1. https://www.who.int/news-room/fact-sheets/detail/tobacco
2. https://www.verywellmind.com
Empathy relates to the ability of establishing an emotional synchrony with what troubles the other. Under the medical context, empathy refers to the doctor’s sensitivity. It relates to the understanding of everything the patient is going through, the way he deals with changes and different feelings. Therefore, empathy is essential to the clinical practice and it should be used therapeutically.

Under this perspective, the lack of empathy of medical professionals can result in many negative consequences to the patients. To the disabled, this reality is even worse, because the lack of empathy can result in the inability of the doctor of seeing beyond the patient’s disorder and in the establishment of stereotypes about the patient.

Therefore, the local committee IFMSA Brazil UNIFOR’s SCOPH, promoted an action to stimulate the development of empathy in the newest medical students. It happened in the freshman reception week, and intended to increase the understanding and stimulate the development of empathy in the freshman students, regarding the difficulties experienced daily by disabled people.

At the first moment, it was made a few questions. What do you (freshman students) understand by the meaning of the word “empathy”? How it could be used in the professional career? What is the importance of the doctor’s understanding of empathy?

These questions were used to create a reflection upon the subject, to introduce a circuit prepared to make the freshman simulate some special conditions that people with physical dysfunctions (auditive deficiency, visual deficiency and amputated limbs). In the circuit the participants had to make some day to day activities, as communicate a need, identify the right medications and the time to take each of them and wear an outfit. All of that had to be done with the limitation of the absence of sight, hearing or a limb. After the students completed the circuit, they had a discussion about the need of understanding the other people context to give a better assistance.

When, after the action, the new medical students were asked whether the physician’s comprehension regarding the patient and their family’s feelings made the patients feel better, all of them agreed. The same happened when they were asked if understanding body language was just as relevant as verbal language to doctor-patient relationship. When posed the statement “the physician’s comprehension regarding the feeling of patients and their family members doesn’t influence the clinical or surgical treatment”, 74,3% of the students disagreed strongly. Other two sentences were even more discredited: “paying attention to the patient’s feelings is not relevant whilst collecting the clinical background” and “attention to the patient’s personal experience does not influence the clinical results”. After analysing these answers, it became clear that empathy is a very cherished value to the sample of new medical students. The activity made them comprehend what is empathy and its importance in the doctor-patient relationship.
The participants not only experienciated a few challenges overcome by disabled people daily, but they also discussed the subject in a round table. This second part of the action was extremely important so that the values and principles indispensable to medical professional could be approached and highlighted, leading to the construction of better doctors. The old approach used in the medical education, that valued the disease and discredited the human being behind it, has no longer space in the medical school's curriculum. Therefore, the discussion about empathy becomes essential among the medical students. Activities like this should happen more often, in order to keep reminding the students about the importance of empathy in the medical practice, to sensitize the future doctors and to give the opportunity to increase this virtue in each of them.

References:


Promoting health in the male public in Brazil, even with the National Policy of Integral Attention to Men’s Health and the November Campaign, is something that faces diverse challenges, such as prejudice, cultural and social factors and disinformation - an example of the impact of the cultural factor would be the man who sees taking care of himself as a form of weakness and femininity, since he is perceived as virile, strong and the provider of the household. This is intensified when one observes the male population of inner cities, especially in the backlands of Pernambuco. In addition, men’s health still has little notice in relation to the feminine in what concerns to the realization of campaigns and actions. Furthermore, health services may still be inadequate among men’s needs and/or expectations regarding their structure and functioning. In this way, these aspects result in the fact that, even today, men live on average 7 years less than women.

Considering these aspects, the IFMSA Brazil UPE-ST Committee carried out activities for the dissemination of information on male health through 27 previously trained medical students at a free trade show in the municipality of Serra Talhada, Pernambuco, Brazil. The place, with great male flow, is where the campaign “Are You Manly Enough to Take Care of Yourself?” occurred. It was widely publicized and had the support of the University of Pernambuco, the Course’s Academic Center and the Municipal and State Health Departments. The event took place outside of the month of the world campaigns on man’s health - because we believe that a broad and continuous debate on the subject can more effectively cause a change in prevention and self-care in this public, and that this debate can’t be seasonal and focused only on one pathology.

During the action, a series of interactive activities occurred with the theme in question. A flow was set up with the participants in which they received information about the most common male pathologies and their prevention. In addition, blood pressure, blood glucose and body mass index were measured. There was distribution of condoms and snacks with healthy eating tips. We estimated the participation of 200 men in the intervention, exceeding expectations regarding their adherence.

The mean age among participants who answered the action evaluation questionnaire was 50.98 years. Of these, about 46.0% reported having little previous knowledge about the subjects and 98.0% felt stimulated to acquire more knowledge and adopt habits that help in the prevention of the main diseases contemplated during the action. 93.6% rated the event as good or great and 98.0% considered it capable of raising awareness about the issues addressed. Finally, 95.2% felt able to spread this knowledge to friends, family and acquaintances.

Regarding the evaluation of the results of the services offered, some alarming data were identified: 56.75% of the participants had altered BMI, of which 14.41% had some degree of obesity; 5 of the 73 randomized glucose measurements were ≥200mg/dl, which alerts for the diagnosis of diabetes; And, in BP measurements, diastolic pressure values ≥120mmHg were identified, what could indicate a hypertensive crisis.
Contrary to expectations - the man who doesn’t take care of himself for not wanting to, out of shame or fear of hurting his masculinity - would have lead to low adherence, however, the public joined the initiative. It was found that trying to bring health services to men was a positive thing, and that this could be a tool to start a culture of self-care. It has been realized that, although many men do not seek health services frequently, they are not completely oblivious or negligent with their health, and can do so depending on the approach used. The event also had good local repercussion, having been reported on a city radio, on the official website of the XI Regional Health Management of the State of Pernambuco and presented at a regional event about the subject.

The perception of the organizers of the action towards its realization corroborated with the result that it was possible, even on a small scale, to reach the main objective of raising awareness and sensitizing the male population of the municipality about the importance of prevention and self-care, making such a group have a greater approximation with their own health. In general, we concluded that actions such as these contribute to forming a critical and reflective physician, committed to the social concept of health and working with the awareness and promotion of it.

References:


The blood is a living tissue that renews itself, fundamental for human life. It is composed by figurative elements and plasma. The blood is responsible for carrying nutrients, oxygen, hormones and other substances to all body organs, thus allowing life maintenance. It also has a regulatory role at the heat distribution, acid-base balance and at the osmotic balance in the tissues. In some situations, in which the blood production or the homeostasis is compromised, such as anemias, hemophilia or even at trauma cases with great blood loss, there is a need for reposition by transfusion.

The World Health Organization (WHO) recommends that at least 4% of a country’s population should be blood donors. In Brazil, Health Ministry info data (2018) shows that about 3.4 million blood donations are made per year. “Data of 2016 indicates that 1.6% of the brazilian population – 16 per thousand of inhabitants – donates blood.” A very low percentual to the World Health Organization (WHO) parameters, because of that the blood banks are in a critical situation.

Recently The Foundation of hematology and hemotherapy of Bahia (Fundação de Hematologia e Hemoterapia da Bahia – Hemoba) has been developing awareness campaigns to replenish the stock, mainly negative Rh factor blood, those are the most rare types. The campaigns happen because the demand of transfusions exceed the donation offer.

Knowing about this struggle in our country, we intend to encourage donations from our campus students with our project, but not in a brief way as we already have seen in other campaigns and also have done. At this project we keep up with monthly small groups of students in different courses and semesters, in which besides donating they are instructed about the “blood cycle”, testing processes and storage of the donated blood.

Besides of the blood donation, many students also sign up to donate bone marrow. Furthermore, through the partnership with the sector of organ harvesting of the hospital and Hemoba, we also promote sessions about organ donation, another point in which our country has many deficits and a lot of doubts in general among the lay population, because of that the debate and enlightenment over the theme is essential so we
can change our reality.

Our goal is to turn blood donation in our campus into a habit, with bigger groups and more often in the future. Turning these students into regular donors and change of habit agents among other people beyond the walls of the university, within their friends groups and families. We seek for acting locally so we can help to change a general existing problem.

Blood donation is 100% voluntary and benefits any person independent of kinship with the donor, it’s an exercise of altruism, respect, generosity and empathy. Core values for all, but that should be specially stimulated by future doctors and health professionals.

References:


Imagine you buy the best computer in the market, the one you have always dreamt of. It has incredible features and everything you expected, but it has one defect: it can be easily infected. It is up to you to decide if you install an antivirus or not. Knowing this, what would you do? The choice is pretty obvious, isn’t it? Now, apply this to a kid. You would expect every parent to protect their children the best way they can, but unfortunately this is not always the case. Picture a world without vaccines, where diseases like the flu, measles or polio might kill you or leave you with lifelong sequels. It would be awful right? Unfortunately, this could soon be the reality of many countries where diseases that had already been eradicated are reappearing. We need to take an active role and do something to tackle this problem. This is why we decided to organize an activity on this topic.

Immunization is one of the most effective preventive health measures and it has allowed us to reduce the impact on Global Health of diseases that used to take millions of lives. Vaccines avoid 2 to 3 million deaths each year, but they could prevent 1.5 million more if global vaccination was achieved. Even though vaccines efficacy has been proved, some people still decide not to get vaccinated. One of the biggest threats vaccinations have faced through history is the anti-vax movement. This movement, originated because of fear and myths, has constantly attempted to convince people not to vaccinate their children, based on studies that have been proven not to have a statistical impact or influenced by external interests. This problem is really important and why we need to work with our communities to teach them about vaccines.

Our activity took place during the World Immunization Week and the Vaccination Week in the Americas, to join medical students and professionals around the world to educate about the importance of achieving global vaccination. This was part of a regional activity, in which several countries in America worked on interventions that allowed them to educate people and demonstrate the importance of vaccination. At an international level, we collaborated with medical students around the world in the creation of a video that allowed us to demonstrate that people from all over the world know that vaccines work. In Ecuador, thanks to the help of our Local Public Health Officials, almost four hundred medical students of eight big cities participated in a symposium and a health fair. We began with a media campaign in which we created infographics about the types of vaccines, common myths, the immunization scheme in our country and the history of vaccines and the anti-vax movement. This information was shared through social media, tv, radio and local and national newspapers to reach the general population. The campaign consisted of ten posts published during a week, and in total we reached 49,360 people, creating a real impact in our community.

During the second phase of the activity, we organized a symposium in which medical students reinforced their knowledge about vaccines and learnt how to interact with parents and kids, especially when they refuse to complete the immunization scheme. We also talked about the origin of the anti-vax movement and important historical events that have allowed it to become a threat to global health. The third phase was based on a health fair in which we taught kids and adults about
vaccination’s importance and how to complete the country’s immunization scheme. We played with kids and their teddy bears to help them lose their fear of vaccines and doctors. In addition, we held a survey among people who assisted to the health fair to learn about the most common myths surrounding vaccination in our country. It was completed by 246 people and they all agreed that vaccines are important. Most people didn’t know about the country’s immunization scheme and had never heard about the anti-vax movement. We talked with people and educated them about these topics and the truth behind the most common myths related to vaccines.

As medical students we need to learn and to teach about the importance of achieving global vaccination, given that it’s the only way to prevent the return of diseases that can kill millions of people. Vaccination has been one of the most effective Public Health interventions in history, but it is our responsibility to teach and demonstrate that #VaccinesWork.

Reference:

Dear SCORAngels,

MSI is a remarkable platform provided by our federation to grow, to publish, to learn, and to cast your voice and work established in the different areas in which IFMSA is active in.

In this segment, you will find articles coming from all around the world discussing different aspect of Sexual and Reproductive Health and Rights; topics that were submitted by fellow medical students and that we believe are an inspiration to all of us to keep working to achieve a world in which no individual is empowered to achieve the full potential of their Sexual and Reproductive Rights.

I would like to thank every single SCORAngel who submitted their work to the SCORA Section of MSI. Your work and contributions are what pushes us forward. I would also like to invite all of you to go through the articles carefully, with an open heart and mind, hoping that maybe you find the motivation you were looking for to bring the experiences home and work on it on your local and national level.

We live in times where sexual and reproductive health and rights are often a political give and take, rather than a universal human right for all. It is through our actions, and the spreading of our work and knowledge that we try to respond to these global challenges and make this world a better and safer place for all.

Happy reading.

Love,
Iheb
The inland city in Santa Catarina presents German colonization and, therefore, a conservative culture. The historical prejudice and intolerance with the LGBT population in the municipality of Blumenau exerts influence in the local medical education and in the quality of healthcare to these people. So, it became essential to approach the subject between students and health professionals in order to bring visibility to this population and the problems they face, thus providing a better quality of life. As a result, the first FURB LGBT health symposium was held for all health academics to promote a broad impact on diversity and respect for the LGBT population.

In order to demonstrate some of the differences related to the care of these patients, several lectures were given to students from different health areas. In addition, something evidenced by the students was this population’s lack of visibility in healthcare, as exemplified by Lionço, which emphasizes the need of health professionals to be closer to public themes and with the specific LGBT related problems and is, therefore, one of the objectives of the realization. The symposium took place on August 15, 2018. Prior to the event, its coordinators sought to promote an impact that would disclose to the university the relevance of respect to the LGBT population. A paper tree was elaborated and exposed in the university library, which contained black papers with homophobic messages and a phrase saying: “Make this tree reborn”. The objective was to provoke a reflection on offensive speeches that are rooted in the population’s vocabulary. It’s visible that almost 100% of the “dark” papers had been overlaid by colored papers with positive messages.

The first speaker was a psychologist who reported on concepts of the LGBT universe, demystifying paradigms on the subject. Afterwards, a plastic surgeon reported on the approach of LGBT patients interested in sex realignment surgery, as well as discussing how the process of adaptation both of physical and social aspects happen.

Then, there was a gynecologist, who spoke of attending lesbian women. A psychologist followed with a speech which dealt with a disturbing reflection on some social stigmas and how they recurrently affect the LGBT population. In the end, there was a roundtable discussion with all the speakers and members of the trans collective from Blumenau. Together, they answered questions from the audience, which further enriched the symposium.

For impact assessment, a questionnaire was applied to the participants, which was to be answered at two different times: at the beginning and at the end of the symposium. The symposium’s impact on the academic community was extremely positive. This result was shown by the impact exerted and the positive feedback received by the coordinators, as well as the answers of the questionnaires. In addition, although 100% of the students who answered the questionnaire believe there’s discrimination related to sexuality in health services, only 44% of the students had contact with someone who lived this situation, and 40.5% didn’t know the term heteronormativity. These results demonstrate the lack of dialogue with
health students about this issue. They are often bereft of prejudice but find it difficult to obtain and approach knowledge about LGBT health, due to the taboos imposed by the conservative society.

The number of correct correlations between terms in sexuality definition also increased. After the symposium only 8.1% of the participants didn’t know how to distinguish them. Moreover, the percentages regarding the confidence to handle this population in healthcare also changed. Initially, the majority of the interviewed judged to have level 3 preparation (30%). After the symposium, most of them declared preparation level 4 (49%), followed by level 3 (34%). The increase was significant, however, the theme should still be discussed in the future to ensure effective and respectful care, since students still have insecurities about the practical applications of the subject. Thus, it’s evident the need to address this issue and how actions can initiate change in a historically conservative context.

With the organization of the event it was possible to perceive the impact of activities on the LGBT population in the university. There’s a need in society to seek knowledge about particularities of individuals so that, especially in the area of health, individuals can deal with obstacles, diversities and peculiarities in treatments. The LGBT Health Symposium in its first edition sought to open the public’s eyes to the need to talk about this population, often marginalized, in a way that each participant propagates their teachings and the importance of the discussion of these subjects.

References:

The right of parents to freely decide about reproductive life was first announced in 1968 at the Human Rights Conference in Tehran, considered a milestone in family planning as a right. Three decades later, reproductive rights were formally established and recognized as human rights - in 1994 at the International Conference on Population and Development in Cairo. Also, within the Sustainable Development Goals (SDG) according to the Montevideo Consensus, these rights are considered in SDG 3, on health, and in SDG 5, on gender equality, thus recognizing the correlation between equality of gender, empowerment of women, and access to quality health information, inputs, and services. Talking about sexual and reproductive rights is synonymous with a dual discussion and full of obstacles. Even though the importance of the issue is known, there is still a gulf between guaranteeing these rights in international agreements and their actual exercise. In 2018, a study published by the Guttmacher Institute in The Lancet showed that women are the primary victims of sexual and reproductive rights violations around the world. And considering that the inequalities are nourished and strengthened, the most disadvantaged people are the women from the poorest strata of society - a group that stands out in the places chosen to carry out the present study: the cities of the interior of the state of Pernambuco, in northeast Brazil. The study also showed that today, about 200 million women in poor or developing countries do not have access to contraceptive methods. Numerically, this contingent is equivalent to almost the total population of Brazil. According to this Commission of the Guttmacher Institute, the necessary interventions for sexual and reproductive health are: Comprehensive education in sexuality; counseling and services for a range of modern contraceptives, with a defined minimum number and types of methods; prenatal care, childbirth and postnatal care, including obstetric emergency and neonatal care; safe abortion services and treatment of unsafe abortion complications; prevention and treatment of HIV and other sexually transmitted infections; prevention, detection, immediate services and referrals for cases of sexual and gender-based violence; prevention, detection and management of reproductive cancers, especially cervical cancer; information, counseling and services for subfertility and infertility; information, counseling and services for sexual health and well-being. Based on this, a comprehensive sexuality education project was carried out in the Basic Health Units (BHUs) of cities in the interior, through educational and interactive lectures, in order to raise awareness about sexual and reproductive rights, unwanted pregnancies, STIs and HIV&AIDS. The main focus has been on the empowerment of men and women to make informed and autonomous decisions about their sexuality and reproductive life and to find a supportive environment to support their choices. A total of 96 people participated in this activity.
with a mean age of 30.5 (± 14.6) years, where the lowest age was 14 and the highest, 75 years. Among the participants, the majority were women, 74.0% (71); and residents in rural areas, 20.8% (20). Regarding marital status, 46.9% (45) declared themselves unmarried, 33.3% (32) married and 11.5% (11) were in a stable union. Regarding color, 56.3% (54) declared themselves as brown, 32.3% (31) white and 7.3% (7) black.

Participants were asked to evaluate the impact of the action, through this evaluation it was obtained that 88.5% (85) considered the event capable of educating on sexual and reproductive rights and human sexuality. Among them, 83.3% (80) reported having some or a lot of previous knowledge on the subject, but only 57.3% (55) knew about their sexual and reproductive rights. Regarding learning, 93.8% (90) said they were able to partially or completely transmit information to family, friends and acquaintances, and 80.2% (77) declared themselves able to apply the knowledge acquired in their daily lives.

It was therefore observed that the main objective of the study was achieved: to raise awareness about sexual and reproductive rights, family planning, unwanted pregnancies, STIs and HIV/AIDS, in order to generate a closer approximation of the public in question with their sexuality, to help them promote their own health, and to find a propitious and supportive environment.

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References:


What is “to fly”? What is to feel the wind kissing your skin? What is to breathe the fresh air that sneaked into your lungs, long devastated by an unfortunate drought? What is the sun? That fiery ball that once seemed as a vanishing dream, barely seen because of that untidy fog that let slip only miserable rays of light, inspiring more terror than heat? What is that strange wave rocketed from the heart right to the extremities without any embarrassment, without any fear of punishment or judgment? What is freedom? Is it a dream or a reality?

For the United Nations, it is indeed a reality. The word “freedom” is mentioned in the definition of human rights as follows: “Human rights are rights inherent to all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other status. Human rights include the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education, and many more. Everyone is entitled to these rights, without discrimination.”

From the previous quote, we conclude, on one hand, that freedom is a natural and legal right. On the other hand, we note that the violation of any human right automatically implies that the subject is not a human. Hence, by stating that a subject is not entitled to be treated as any other person because of the way they think, act or whatever aspect they may present, it creates a confrontation with the norms cited above. This leads us to one particular confrontation: The “war” between LGBTQI+ and society.

In fact, gender diversity and sexual identity are still regarded in some areas as an abomination.
society and its elements, starting from the police officer to the hospital workers and any other individual or organization that misuses the sanctity of culture and religion to cover-up their close-mindedness.

We can take Morocco as an example where these discriminations on the basis of gender identity and/or sexual orientation are not addressed in any Moroccan civil law, therefore there is no protection for the victims. This has moved some of the Moroccan students and urged them to make their first step in advocating for LGBTQI+ rights.

The Standing Committee on Sexual and Reproductive Health and Rights including HIV and AIDS (SCORA) of Medec’IN-Casa, the Local Committee of the city of Casablanca, managed to get the authorization to organize a screening in one of its conference rooms for two different movies: “Call Me By Your Name” and “The Normal Heart”, both addressing the LGBTQI+ subject. The screening was preceded by a session to introduce the attendees to Sexual Orientation, Gender Identity and Expression (SOGIE), which made some of them sceptical and tense regarding the idea of re-evaluating the actual status of sexuality and gender identity in Morocco. Fortunately, the movies eased down the tension in the room. After the screening, everyone was free to discuss their opinion about the topic.

This project, as futile and insignificant as it may seem, was a huge step in the LGBTQI+ fight and it proved that art could be used as a weapon for advocacy because, on occasion, harsh wars require gentle tactics.

How many LGBTQI+ people are struggling in the world? How many of them are hiding in a sorrowful “closet” in fear of the judgement and persecution behind the door? How many of them are discriminated against and harassed every day? Will they ever feel that strange wave dancing freely in their bodies? Will they ever witness the vanishing of that suffocating fog? Will they ever get to take their first breath? Will they ever fly?

These are questions for you to answer. These are the enigmas of a present you may trade for a future of freedom and expression instead of a future of condemnation and censure.

Reference:
Grandeur and lavish expenditure on weddings coupled with futile rituals like dowry are a crucial part of societal expectations in Pakistan. Ignorance regarding the reproductive health of females is at peak and such topics are considered a huge taboo.

Pakistan is a country where it is looked down upon for an unmarried girl to see a gynecologist. Many mothers would rather have their daughters writhe in pain rather than take them for a gynecological exam, fearing what people will say. Adding to this, the massive lack of awareness regarding diseases in the general public and inaccessibility of basic healthcare facilities to girls and women is an alarming sign. In this scenario, catching complex reproductive disorders becomes difficult. Given the complex nature, these disorders are not easy to diagnose and are often confused with other diseases by most general practitioners.

Cervical cancer is cancer that starts in the cervix i.e. lower part of the uterus in the female reproductive system. It is caused primarily due to the human papilloma virus (HPV); a common virus which can be passed from person to person during sexual intercourse. The HPV vaccine is recommended for young females of age group 11-12 years old. According to the World Health Organization (WHO), the prevalence of cervical cancer has risen in Pakistan where almost 20 women fall victim to cervical cancer daily, making it one of the top 10 countries with the highest female mortality rates. Though a preventable disease, the mortality rate is very high because it is an ignored ailment in Pakistan in terms of screening, prevention and vaccination. More than 70% of cancer patients present with very advanced stage of malignancy and this is the cause of the high rate of mortality in Pakistan. One of the key issues in cervical cancer prevention programmes is to determine how to obtain high levels of attendance, which is essential to achieving adequate coverage. Barriers to screening uptake include a lack of knowledge about the disease, a lack of familiarity with the concept of prevention, the geographical and economic inaccessibility of care, the poor quality of services and a lack of support from husbands and families. Evidence indicates that to minimize these barriers, strategies in low-resource settings should be socially and culturally appropriate.

However, often times there are no strategies implemented to tackle this issue, which affects a person in different settings. How would you personally feel living with a condition that affects you on a physical level, leaves a lasting damage on the human mind and has no cure?

Women suffering from Poly Cystic Ovarian Syndrome (PCOS), also called the Stein-Leventhal Syndrome, are the perfect example of this quandary. It is the most common, most debatable and a multifactorial female endocrine disorder in women of reproductive age with Pakistan being no exception to it. It is described as a condition caused by the imbalance of female sex hormones in a woman which could be due to hereditary causes or excess body weight.

“She is hormonal” is one of the most common phrases used to describe women at work. But
for the sufferers of PCOS, it’s a fact. Though the hormonal changes may lead to irregular menstrual cycle, ovarian cysts, trouble getting pregnant, and other health changes, the condition is manageable if caught in time. Prevention and treatment are primarily lifestyle changes including weight loss and consuming a healthy diet.

A successful awareness campaign was conducted by SCORA under IFMSA Pakistan AIMC LC on 29th January in Punjab College, Campus 10, Lahore. Volunteers interacted with young female pre-medical students educating them regarding the causes, risk factors, signs and symptoms, preventive measures and treatment options associated with the prevailing reproductive disorders. Common myths and misconceptions were also cleared, and an attempt was made to break the stigma surrounding female reproductive health.

The campaign included a fun activity titled ‘Teal Busters’, where campaign volunteers selected students from each class and divided them into 4 teams that were made to compete for a prize. The activity comprised of informative questions related to the presentation coupled with fun tasks to further instill the information in the young minds and lighten up. Prior to the campaign, a 2-day capacity building workshop was conducted to capacitate the presenting volunteers and to give them a better understanding of the disorders.

Women with reproductive health disorders are frequently looked down upon. We, as a society, should join hands and provide emotional as well as social support to help them deal with the effects of these ailments on their lives. Let’s educate and empower women, let’s establish a bond of Resilient Sisterhood. Together we can, together we will.

References:


Violence kills an estimated 1.6 million people each year, and millions more suffer violent attacks. However, a type of cultural violence, historical and unjustifiable has gained prominence in academic research and caused shock to society: violence against women. Whether it is physical, sexual, psychological or moral, women are often targets of aggression based largely on their gender. By 2018, though, we might have expected a different scenario.

Considering this aspect, it is important to reaffirm the roots that established and maintains violence against women and to analyze the role of Primary Healthcare in the care of women survivors of sexual violence along with their main limitations.

The cultural creation that gradually changes in history brings the feminine image linked to fragility and the masculine one linked to force and greed, strengthened from early childhood. The cultural factor has a great impact in what is called violence against women, based on an implicit inequality of power in the general context of society.

Changes in society to improve conditions for women include public health strategies aimed at the treatment of abused women. The creation of campaigns that encouraged them to flee from an oppressive reality was added and resulted in improvement in the reception of these women in the public health service. Among so many changes, however, what is still observed are alarming figures measuring violence against women.

One in three women worldwide suffered physical and/or sexual violence during their lifetime. This statistic can still be found higher in view of the under notified cases. In this context, confronting violence means deconstructing social norms and cultural standards together with a better treatment by the State in order to encourage women and contribute to reduce their psychological suffering as a result of the violence suffered.

When we talk about women's care, politics are created in all spheres of society. In health, health professionals should first of all understand the difficulty women face in seeking health services, for reasons such as violence, fear and lack of knowledge of the protection they have in case of violence. The examination must go beyond possible physical injuries, above all it is necessary to listen to them, to advise them and to encourage them to leave a situation that depreciates the human being, because the silencing of women often provides an invisible character to gender violence.

In addition, women who seek basic health care, even without presenting complaints of violence should also be investigated because they often do not look for health care at the time of the violent act and health professionals end up losing the opportunity to intervene and develop preventive actions. The daily violence suffered by women is undoubtedly one of the great challenges for the basic health network.

The vast majority of Primary Health care professionals have experienced women who are
in situations of violence. Physical and emotional violence have been identified as types more recurrent. Unfortunately, however, knowing a situation is different from knowing how to act toward another human being. The absence and/or ignorance of specific protocols to act in cases of victims of violence against women come from the difficulty seen in a large part of the training of health professionals.

The reasons that limit health professionals to enter these issues vary from embarrassment, lack of time and lack of technical preparation, factors that can and should be reversed at the time of formation. Unfortunately, the reality is often to refer women to specialized services before full listening and humanitarian care can take place.

In short, in order to be effective in the care of women who experience violence, care must be integrated and integral, listening must be complete, empathy must prevail in order to provide confidence to the public who had suffered and may continue to suffer from physical, psychological or sexual abuse. The purely biomedical model is not enough, because first of all there must be an approximation between the victim of violence and the health service that attends to her. Better preparation to deal with female violence is essential to move forward to eliminate this long-standing and unacceptable problem.

References:


A call to action for Sexual Education Programs in the Dominican Republic

Lia Patricia Reyes Santos
ODEM Dominican Republic

In January 2019, ODEM-Dominican Republic members of the Standing Committee on Sexual and Reproductive Health (SCORA) implemented training workshops on sexual and reproductive education to prepare medical students for their health initiatives in low-resource communities in the Dominican Republic (DR). Over a period of six weeks, six four-hour workshops were prepared on Saturday mornings. Dr. Juan Pablo Matos, a physician, educator in sexual and reproductive health, and advocate of health promotion, served as the primary instructor and supervisor for this activity. Topics included biological aspects of human sexuality, family planning, human rights, prevention of teenage pregnancy and sexually transmitted infections (STIs), and legal perspectives associated with sexuality and access to national health programs for adolescents and young adults. As facilitators, SCORA members used various didactic formats such as plays, debates, games, and open discussion fora.

On May 18, 2019, SCORA members completed the sixth training workshop in the Yaguate community, a small village of 42,325 people in San Cristóbal, DR². Through home visits, we met with Yaguate community members, educated them on diverse topics, and requested their active participation in specific activities. These health topics included self-reflection through the development of family planning, knowledge about reproductive and sexual health, and comprehension of safe contraceptive methods. We also discussed recommended health behavior to reduce risk of exposure to vectors (e.g., Aedes aegypti mosquito) and water-related pathogens (e.g., cholera), especially with the upcoming hurricane season.

While developing these workshops, we realized that medical students are not prepared to present health seminars on sensitive social topics. In the DR, since politics is heavily influenced by Catholicism, developing sexual and reproductive health education programs can be challenging. In one recent example, the DR Ministry of Education (MINERD) approved the application of gender equality programs to public schools. The Catholic church has criticized this initiative, citing the inclusion as harmful for children's education and their future choices. From a public health perspective, however, these programs serve as an educational tool to increase awareness about sexual health and beliefs, creating an inclusion and respect environment in public schools ². Hence, by educating adolescents about important reproductive and sexual health topics, such as menstrual hygiene, risk of infections, and pregnancy, DR health professionals can...
collaborate to reduce maternal and infant mortality rates associated with poverty and lower levels of education\(^2\).

As medical students, we must value the application of our didactic coursework through our community health rotations. By entering our local communities, we can learn about the needs and priorities of community members as well as learn about the influence of the determinants of health that influence health outcomes. Efforts must be targeted to improve sexuality education programs in order to reduce teenage pregnancy in the DR and other Latin American countries. The delivery of sustainable health care services depends on future health professionals to educate community members on prevention strategies to protect their health from emerging public health threats.

References:


Globally, 44% of pregnancies are not intentional and approximately 200 million women do not have access to contraceptive methods\(^1\). In Brazil, approximately 500,000 women perform clandestine abortions and 250,000 are hospitalized for complications of this type of procedure annually\(^2\). Therefore, there is a need for a greater approach on the subject of sexual and reproductive rights, understanding the importance of initiatives to disseminate knowledge about this subject, including information on contraceptive methods and sexually transmitted infections, especially considering those which are inserted in contexts of social vulnerability.

This importance is highlighted by a Brazilian study\(^3\) that showed that 55.4% of women who had children in Brazil did not plan their pregnancy, most of them being those with the greatest social vulnerability: adolescents, racial minorities, and those with low schooling. Looking at the younger population, besides being a group at risk of unintentional pregnancies and their consequences, they are also at risk of violating sexual and reproductive rights, since it is in this group that sexual and reproductive activity begins, and often, this group has total or partial lack of information on the subject\(^4\).

Sexual and Reproductive Rights under discussion

Eduardo Sales Oliveira, Pedro Anderson Ferreira Quirino, Yane Renata Barbosa de Araújo, Lísia Miriam Maciel de Almeida

IFMSA-Brazil

www.ifmsa.org
Thus, it was decided to carry out a project about this subject, in Pernambuco - state of the Brazilian northeast, working mainly with young high school students. Interventions were conducted through traditional and interactive classes using 1-hour group sessions and addressing issues of sexual and reproductive rights, teenage pregnancy, family planning, and sexually transmitted infections, including HIV&AIDS.

Speeches were held in six cities in different mesoregions of the state, approaching a total of 1689 high school students with a mean age of 15.5 (± 1.3), most of them were women (55.5%, or 938) and live in urban areas (61.5% or 1038). Out of the total, 58.6% (990) declared themselves brown; 19.7% (332) white; and 14.9% (252) black. Regarding marital status, 89.1% (1505) reported being single and 5.6% (95) were in stable union. Regarding the evaluation of the project, 42.1% (710) stated that they had no previous knowledge about the subject, and 50.5% (853), had no knowledge of their sexual and reproductive rights. Regarding the effectiveness of the event, 92.4% (1560) considered it capable of educating on sexual and reproductive rights and human sexuality, 89.6% (1513) said they were able to completely or partially pass on information learned to relatives, friends and others, and 81.3% (1374) showed an ability to apply the knowledge acquired in their daily lives.

It is worth mentioning that the issue addressed here is already recognized at the international level in agreements considered essential for achieving social justice and national, regional and global commitments with the pillars of sustainable development, in accordance with the Montevideo Consensus. In order to achieve such a development, the Guttmacher Institute commission developed for The Lancet, in 2018, a list of necessary interventions for The Lancet, in 2018, a list of necessary interventions for sexual and reproductive health, one of which is comprehensive sexuality education (1,6), which is the key point of this project: to inform and educate about sexuality, showing the importance of sexual and reproductive rights, and seeking to bring the public closer to their sexuality. The focus - as the data analysis shows - has been the empowerment of young people to make informed, autonomous decisions about their sexuality and their reproductive lives and to find a supportive environment to support those choices.

Finally, we believe that prevention and awareness promoted by health education actions for the community should be valued, since the population is the main tool for promoting their own health and, therefore, their autonomy and initiative are fundamental.

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Dear SCOREnegades around the globe,

The high-Exchange season is upon us! Between the months of June, July and August, we see more than half of all of our SCORE Exchanges take place around the world, so what an amazing moment I hope you’re all living! There’s nothing better than receiving students from all over the world in your cities, universities, and maybe even your own homes! Furthermore, some of you may have also attended an exchange during these northern-hemisphere summer months, and if you did, I really hope you had a blast!

In this edition of Medical Students International, SCOREview brings us all amazing and super interesting articles to read, learn from, and think about the way that research changes our thinking, and challenges us to thrive for higher ground in the field of medicine.

Through reviews of exchanges taking place in Barcelona and Romania, catch a glimpse of the amazing experiences waiting for you in a SCORE Exchange. Also, take your time to go through the several articles featured in this edition, where we start to scratch the surface of research as a powerful educational tool, not only as an improvement of those that conduct it but also as a tool to improve healthcare systems. Furthermore, read amazing testimonials from some of our current National Officers for SCORE, where they share with us part of their journeys, looking specifically at how your work as a NORE can turn you into a better research-project appraiser, and how one of our flagship workshops, the Training New Exchange Trainers workshop (or TNET, as we like to call it) serves as a wonderful all-round tool to better serve your NMO and members in search for better exchange programs.

So now that you’re settling down from the busy last few months, take the time to enjoy this magazine, and always remember that SCORE is one of the most accessible and powerful platforms to conduct a research exchange! It’s always a pleasure to attend your emails and messages, and thank you for the constant and determined work to make our Dark Blue family a bigger and better place for medical students around the world.

Sending Dark Blue Hugs to you all,
Erwin Barboza-Molinas, M.D.
When I was LEO-D (Local Exchange Officer Director) I received incomings from different parts of the world. I was very excited to help them with their internship and also show them the city, culture and people. Seeing their experience, I decided that was my time, I should go on an exchange! My first choice was to Catalonia (December 2018/ January 2019) by SCORE, because it is a cutting-edge medicine, besides my family ancestry. This opportunity for 8 weeks was the first and only like that, available by IFMSA Brazil. Fortunately, I was approved. I was placed on IMIM (Hospital del Mar Medical Research Institute) a research center inside the PRBB (Barcelona Biomedical Research Park), one of the largest hubs of biomedical research in southern Europe, on a project named “Cardiovascular Epidemiology and Genetics”, something I am very interested.

It was really different, because I had never seen a large building (and beautiful, just in front of the Barceloneta beach) only for science, with 1400 workers from 45 different countries; something unimaginable in Brazil. I studied on IMIM in an office (I had my own desk), 6 hours a day. I was the only student; my 7 coworkers were graduated, from different areas (biology, engineering, nutrition) and countries (Mexico, France, Saudi Arabia, Ecuador, Spain). I stayed in the cardiovascular department with my tutors Roberto Elosua, Maria Grau and Irene Roman, to develop both strands of the project. I learned how to search on literature, organize/analyze data and use statistics (R system). I knew the laboratory where miRNA samples we were studying are analyzed. I went to meetings with the research group where they taught me how to write and develop a project. Then, I improved my knowledge on epidemiology, statistics and genetics (basic and advanced), subjects far for most students. My coworkers and tutors taught me a lot, mainly, how genetics can diagnose and predict cardiovascular diseases. I felt welcomed even far from home. I still keep in contact with them, developing the project from my country.

I also had the opportunity to know the public primary attention center La Marina to follow medical appointments, for 2 days. It was an amazing experience to know the health system of Catalonia, besides the research project. I observed that illness pattern is different from Brazil, because their population is much smaller, homogeneous and older. However, some things are similar to my country, in relation to the structuring of public health and care, but working much better, with more wherewithal and efficiency.

The first part of my exchange was not the travel itself, but receiving a Mexican incoming that provided to me and to my family, an international experience without leaving home. But, my first travel abroad was, in fact, for my exchange. I was hosted on a student flat in Barcelona, very close to subway and to Sagrada Familia, the most visited monument in Spain. My contact person, Laia, was a biology student; on IFMSA Brazil only medical students can participate on the exchange program, and it was very interesting that other courses had this opportunity. In the flat, on December, it was just me and a mexican incoming. In January, it was totally different; 6 incomings in the flat, from Argentina, Peru, Chile, etc. I felt very at home and welcomed.
South Korea, Taiwan. I also had contact with incomings from Costa Rica, Bolivia, Mexico, that were in other universities and even had a dinner where everyone brought a typical food or drink. One day, we had a discussion about antimicrobial resistance, with all the incomings and natives, it was very fruitful, because we had different views. In my last days, my contact person took me to a disco and to participate of Los Castells, that is a Catalan tradition, building human towers, it was really funny. Furthermore, I learned a lot about Castellano (and a bit Catalan). Every day, I tried to knew a different place of Barcelona (love it!), on weekends, other cities (I went to Valencia, the Paella’s land, with some incomings) or countries, everything wonderful.
Everybody that can go on an exchange, do it; because it is a transformative experience, both personally, culturally and academically. I learned a lot about science and interdisciplinarity, knowledge not taught during medical course, that will improve my professional performance. Furthermore, this extended exchange (8 weeks) was essential to get really involved with the project, people, city and can open the doors to return to IMIM someday. The best 65 days!
DO RESEARCH: Think Different, Go Further, Soaring Knowledge with Research

Jonathan Salim – M. Gilang D.P.
Vigyan Dananjaya
CIMSA-ISMKI Indonesia

Indonesia is an archipelago country located in the equator, which act as one of the centers for varieties of diseases. As a country withholding the global title of the 4th most populated country, Indonesia should utilize its potential human resource as a foundation to improve the national and global health. In turn, to actualize that notion, adept human resources are needed, especially researchers.

Unfortunately, according to Prof. Dr. H. Arief Rachman, M.Pd who work as the National Commissioner of Indonesia for UNESCO, Indonesia has a dangerously low number of researchers compared to the neighboring countries. Indonesia only has 1,071 researchers in on million citizens while Malaysia has 7,000 and Singapore has 2,590.

In addition, Indonesia is also standing on the low end of research productivity. According to Indonesian Institute of Sciences (LIPI), there are only 4,500 to 5,500 research publication from the massive total of 261.1 million Indonesian population, even when there are 12 – 14% of university teachers with Ph.D. Henceforth, there is an urgent need of competent and adept Indonesian researcher.

Meanwhile, research itself is essential (especially medical research) due to the fact that the result can be used to improve diagnosis, prevention, and treatment method. Research results can also be used to identify what disease is currently in outbreak and many more. Thus, it is required for medical students to know research well, preparing them for the plunge straight to the community.

In accordance, SCORE has a primary mission to distribute intensive and focused research projects as a media for medical students to improve their knowledge on their chosen medical fields, as well as to develop professional and social networking within Indonesia and abroad.

The National Committee of Research Exchange (NCRE) issued the stance that SGP (SCORE Goes Public) will be compulsory to be done within each SCORE local. SGP is aiming to educate the SCORE members all about research including its application to the community as well as how to analysis the data.

SGP also contribute as a way of implementing the 3rd & 4th SDGs and IFMSA Program. Quality education can be attained by providing opportunity to expand their knowledge about research and its application; this knowledge can be used to improve national and global health portraying good health and well-being. Those armed SCORE members also can be seen as the implementation of “Human Resource for Health” program.

“Do Research” is an annual event aiming to introduce research and its communal application to SCORE members with the chosen theme cervical cancer. It is hoped that SCORE members can expand their understanding and able to apply the expertise to a nearby community.

As a local level SGP, “Do Research” was carried out by MSCIA UB in an attempt to fulfil the compulsory criteria of an educational event by the NCRE. The activity is spread across these main focus areas: cervical cancer lecture, research course study, and small working group on data collection & analysis.

During the 2nd of May on the Joint Education Building, the day was filled with thrilling lectures on cervical cancer by dr. Nugrahanti Prasetyorini, Sp.OG (K), who discuss cervical cancer all from its etiology, risk factors, through its treatment and prognosis. After the material was finished, then the ice breaking session commenced, namely by doing the DORE department internal lingo to
increase participants' enthusiasm. Furthermore, DORE members were also taught basic research work by seniors from the LSIM organization. Small working group then follows where SCORE members were divided into several groups and guided by facilitators to create a research outline on a given case. Realistically, this SWG challenge members to think critically as well as their knowledge. On the next day, members conduct health promotion and data retrieval. SCORE members retrieve data from secondary database of previous research in cervical cancer. In this second day, members distribute questionnaires to Arjowinangun Village community, Malang, East Java. The questionnaires consist of data for a study titled “The Effect of Door-to-Door Health Promotion on People’s Attitude on Early Detection of Maternal Cervical Cancer in the Arjowinangun area, Malang Regency, East Java”. “Do Research” is considered successful with 80% attendance and objective increase in the pre-test to post-test score.

Hopefully, with “Do Research” activity, MSCIA UB students and SCORE members can strengthen their interpersonal bond and creative mind. Blue hugs from Indonesia!
The Dominican Republic is a tropical island located in the Greater Antilles on the Caribbean Sea. Since the island represents a mixture of European, African, and Taino cultures, it is only natural that we maintain many traditions that have been passed down for generations. These traditions influence every aspect of our daily lives, ranging from gastronomy, religion, and medicine.

Evidence-based medicine (EBM) is defined as the interaction between the best research evidence and clinical expertise to make the best decisions according to patients' values and circumstances (1). As medical students, it is important to realize that daily clinical practice is not strictly following established guidelines. Each situation is unique, and sometimes we have to trust our experience and expertise to make appropriate decisions. Therefore, while it is true that we need to apply EBM in our practice, we cannot stop visualizing it as a tool. Kelly et al state, “As practicing scientists or doctors we must be humble about what we know, acknowledging our (and our tools') fallibility” (2, p.2). For instance, applying EBM in the Dominican Republic can be challenging because patients' general views about health care service delivery may prioritize traditional remedies for disease management of the flu, tetanus, and hepatic disease.

According to the World Health Organization (WHO), traditional medicine is the accumulation of practices and knowledge, based on the beliefs and experiences of different cultures used in the maintenance of health as well as in the disease prevention, diagnosis, and treatment (3). To start, it is important to examine two examples of local remedies. Locally, musk seeds are considered as a cure for tetanus and epilepsy, and “cadillo de perro” plant branches are assumed as a cure for hepatic disease (4). Since these popular beliefs can be dangerous to patients' health, how do physicians-in-training overcome these challenges? In this specific case, we should educate patients in their health care decision-making. By describing the benefits and risks of pharmaceutical agents and traditional remedies, patients can learn about the efficacy of pharmacological agents and understand possible adverse reactions and interactions with local remedies.

However, what about the remedies that do not represent any specific harm for patients? For example, a mixture of honey, lemon juice, onions, and watercress have been used for generations as a treatment for the flu (4). Its ingestion does not necessarily harm patients. In contrast, it can even supplement the effects of the treatment because it is well known that ingesting an inert substance believing that it is an active one, can generate physiologic effects expected from that active substance (5).

In conclusion, as adolescents, we used to believe that doctors treated diseases, but now as medical students, we realize that doctors realistically do not treat diseases but rather individuals. Behind each person, there is a collection of experiences, values, and traditional practices that influence a person's lifestyle. We tend to disparage them and force their replacement with what we know or what EBM suggests as best practices. As physicians-in-training, we must recognize relevant cultural differences, be able to negotiate common grounds, and accommodate our patients' beliefs as necessary without risking their health.

References


My Romanian Research Exchange

Bună ziua!

My name is Lidya Cendra Mulyani from Universitas Pelita Harapan (UPH). July 2018 is an unforgettable moment in my life. I got a chance to go to Romania as an exchange student! When I know that I got Romania, the first things I checked is the project! For me the most important from this exchange was the project. I checked IFMSA website for the project list almost every day until I am finally able to decide on my first, second and third desire project.

I finally got the Acceptance Letter. As it turns out, I got accepted in my first project choice. My project title is “The differences that standard intra-operative monitoring offers and what Adequacy of Anesthesia monitoring adds.” This project is a Clinical Project without Lab Work. I work at Spitalul Clinic Județean de Urgență Timișoara in Anesthesiology Department. My daily activities including observing the operation (we only choose the surgery that used the general anesthesia) then take the data about the entropy, the duration of the surgery, what medication is used during the surgery, and everything that happens in the surgery like if there’s hypotension, bradycardia, hypovolemic shock, etc. I recorded everything for every 15 minutes until the operation ended and the patient is awake. After the data was compiled, I input the result into the computer.

Every year, Romania holds the social program as a National Trips! So, we do the social program together with all the incomings in Romania! It's
amazing, how you can meet people from all over the world! They held the national trips twice the Sibiu trip and the Brașov trip, but we also visited the cities near there like Arad, Alba Iulia, Sinaia, Sighișoara and Cluj-Napoca.

The thing that I love the most about Romania is the people! I couldn’t ask for a better companion. I met Anita, the coolest LEO, Nicole a Brazilian girl who loves parties, Isabel the cutest Mexican girl, Amira the Tunisian girl who always takes selfies, Dina the Egyptian girl who just love rivers, Courtney my partner-in-crime/project partner from Malta, Tiberiu my funny contact person, and many other kind and wonderful Romanian.

I really love this exchange. I have gained so much that I couldn’t ask for more. I did many things I’ve never done before through this exchange.

They gave me many opportunities and also a chance to broaden my horizon. This exchange really opens my mind toward the emergency system in other country especially Europe. We even have a chance to meet the emergency head of department. His passion as an emergency doctor for decades really motivates me to work harder, to study harder toward my goals as a doctor in the future.

How being a National Officer on Research Exchange improves critical appraisal of research projects

Kevin Alvaro Handoko - Jonathan Salim – M. Gilang D.P.
CIMSA-ISMKI Indonesia

Howdy medical students!
My name is Kevin Alvaro Handoko from CIMSA-ISMKI Indonesia as a participant of the Pre-General Assembly Training New Exchange Trainer (TNET) Workshop on Slovenia March Meeting 2019. Firstly, I joined TNET Workshop because of my strong belief that Exchange program helps medical students to advance their skills and expertise, whilst experiencing contrast cultures and backgrounds. This in turn helped to shape a more culture-sensitive doctor in the future.

Moreover, I would love to help local committees in solving problems regarding exchanges. Statistically speaking, a lot of LCs still have problems on research projects hunting and outgoing management. These difficult situations should be urgently addressed and solved accordingly. TNET has helped me develop the necessary skills by brainstorming with other participants and learning from other Exchange Officers with similar problems.

Attending this workshop helped me to better organize IFMSA Exchanges in Indonesia. The
academic quality assurance and exchanges sustainability are imperatively needed to maintain the high-quality exchanges. Furthermore, my motivation includes also the problem on delivering Pre-Exchange Trainings (PETs) and Upon Arrival Trainings (UATs), which impacted due the Exchange Officers negligence on how to deliver them properly and to impact the participants attending these trainings. My attendance in the last TNET helped me on educating Exchange Officers in our NMO on how to conduct and prepare PETs or UATs in line with IFMSA purpose and aim, thus, my previous attendance indirectly helped IFMSA on growing and maintaining the high quality of Academic Quality in my NMO. Since then, our Exchange Officers also have more comprehension regarding delivering these trainings on the local and national level. Also, I have since encouraged some of member from our NMO to apply on the next TNET.

In addition, personally, TNET has helped to grow more as an Exchange Officer. This workshop helped me to understand more regarding Exchange-related topics, how to conduct and deliver it through trainings in local and national level as well as apply the knowledge gained in order to sustain the Exchanges in my NMO. By attending this workshop, I gained a lot of insights on topics such as Sustainability in Exchanges, Global Health Education, Stakeholder Mapping and Sponsoring, as well as Strategic Planning and Annual Working Plan, which I have not understood well previously. Furthermore, one of the sessions named Intercultural Learning and Ethics in Exchanges made me apprehend to a greater extent on how to be a trainer for such topics, which has become an integral part in PETs and UATs. Being an Exchange Trainer also helped me on my confidence, public speaking ability and preparation on delivering the trainings to builds others’ capacities, which helped me to give better knowledge to other Exchange Officers on delivering it in the local level.

Other than that, TNET has helped me to solve problems, manage conflicts, and understand people with different backgrounds and perspectives. During the workshop, I also met a lot of inspiring and resourceful Exchange Officers all around the world with multicultural backgrounds, which helped me to understand deeper on IFMSA Exchanges and solving its problems. Moreover, I have gained skills on giving people feedback to help other people grow from their mistakes, which is very crucial on supporting people on growing. Through this workshop, we are not only prepared to be able to deliver and conduct Exchange-related training sessions, but we also pushed to become the better version of ourselves.

From my standpoint, I really recommend everybody who are intrigued to become an Exchange Trainer and understand more on Exchange-related topics as well as gained soft skills that could not be obtained by regular Academic attendance, to take part in the next Pre-General Assembly IFMSA Training New Exchange Trainer because this workshop has surpassed and helped me grow as an Exchange Officer as well as a person.

Blue hugs from Indonesia!
How being a National Officer on Research Exchange improves critical appraisal of research projects

Letícia Nunes Campos, Túlio Henrique Maia de Almeida Oliveira
IFMSA-Brazil

In Brazil, all universities which hold a medicine course ought to design their medical curricula based on the National Curricular Guidelines, a document whose principal aim is to describe the abilities and competencies that a future physician should develop during the graduation (1,2,3). Among them, a very important one is required from the egress doctor, which is to critically appraise references, methods and results, on the purpose to evaluate the level of evidence and healthcare practice (1,2,3).

Nevertheless, many Brazilian medical schools still have a lack of scientific methodology teaching, so how could the undergraduate students overcome these circumstances and have the opportunity to develop such critical appraisal skill? A long list of strategies can be written replying to this question, though one of them would be to search for extracurricular activities, including being a member of IFMSA Brazil and more specifically working on the Standing Committee on Research Exchange (SCORE) as National Officer on Research Exchange (NORE).

Undoubtedly, being a NORE involves a series of tasks, but a vital part of the job is to analyse, correct and supervise the research projects' submission to the Projects Database. Even to a small National Member Organization (NMO), this task is complex due to the exigency which is required to ensure the projects’ quality. When it is echeloned to IFMSA Brazil, one of the biggest NMOs in number of projects with an average of 60-70 projects per exchange season, this duty becomes more difficult owing to the numbers of project and to the necessity of ensuring a continuous flow of projects supervisionment.

Inside IFMSA Brazil, this entire work is done not only by the NOREs, but also by the National SCORE Supervising Board (NSSB), a team created 3 years ago and composed by Local Officers on Research Exchange (LOREs), which helps to guarantee the academic quality of the research projects of our NMO. Due to the fact that this team was created recently, it was no easy task to capacitate its members, because more than proportioning exchanges, SCORE works with rigorous scientific methodology and has its communication system with the Supervising Board. However, the NSSB plays a vital role in our NMO, as it helps the NOREs to solve many problems and to spread the research and publication message among our local committees.

So, how is this minucius process related to critical appraisal of research projects? For starters, by filling the project form, the student is capable of training and analysing essential parts of any research project, such as introduction, objectives, methods. For example: how clear is the message on each element of the research project and are the parts connected to each other? Does the objective define the population, intervention, comparison group and the expected outcomes (the PICO system)? (4) Is every technique mentioned understandable to the reader? Is the study replicable? In other words, could a researcher reproduce the study in his or her medical school?

In addition, another point which should be highlighted is the relevance of the study. Considering that an exchange student from a different country will travel all the way to Brazil,
it is evident that all efforts shall be put to make this experience the most academic as possible, so this incoming can achieve educational benefits of practical and theoretical knowledge from the medical research field. Taking this into account, one question which all students must bear in mind is how relevant is this research? How can it influence the physicians' clinical routine? Can it be beneficial to the patients and the community? (4) Finally, NOREs should ask themselves if that research project can make a difference to the medical formation of an undergraduate student.

Furthermore, one item that definitely cannot be underestimated are the references, since they are the basis of every research project, so as the level of scientific evidence (4). For this topic, some crucial questions that must be asked are: How old are the references (more than 5 years)? From which journals are they from? Does the journal have a high standard and impact?

Therefore, taking everything into consideration, it is clear that the work as a NORE is related to critical appraisal of research projects and many of its elements. Undeniably, all of these abilities which a National Officer develops can favour the scientific and technological development on a future onset, directing the resources to the individual and collective health necessities and supporting great research projects to the society.

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In the 20th century we experienced the era of the industrial and technological revolution. This phase has become extremely relevant in the context of public health¹. With access to more precise and specific diagnostic methods, the prognosis of the patients became better; yet inequalities still exists. As a brazilian medical student and member of a study group, I had the opportunity, through IFMSA Brazil and SCORE, to experience some differences between the access to health technologies and research in an university in Italy.

To talk about such differences, it is important to explain some local characteristics. I perform clinical and research activities in a neurology center at the best public hospital university school in the northeast region of Brazil, which has a large number of people living in poverty, specially in the suburbs.² In the other hand, I had an opportunity to visit a Neurology reference center at a public university hospital in a developed region in north of Italy.

Thinking about an european reference center, two points are expected: well capable human material and hospital resources of excellence. Initiating a qualitative approach by the conjecture of the european hospital the presence of these two aspects is observed. The routine of neurologists was to hold meetings in the morning and then an inpatient or outpatient visit was performed. All procedures done by any hospital professionals should be written in an electronic medical record. In addition, the hospital had a genetic diagnosis service and electronic protocols for most of the requisitions. Many lumbar punctures where done, as they are essential for countless diagnoses such as genetics and infections. When even more experienced neurologists found it difficult to perform, immediately the radiological aid with assisted CT scan was requested and collection was done briefly.

It is known that the neurological therapy has found several advances with the use of electronic devices. Practical and abundant examples in this center were: the use of the Deep Brain Stimulation (DBS) devices for patients with severe Parkinson, conducting polissonography and Electroencephalogram (EEG) with the latest equipment and software that could film and compare the registered circuit and activities concurrently. All the tech information was grouped in a local database for better evaluations and comparison, being a powerful tool for scientific research.

Characterizing the reality of a neurology reference center in a brazilian public hospital we can analyze those same two aspects above. At the beginning and with an obsolete thinking, I thought that the divergence of human material would be significant between my local hospital and the foreigner. However, I realized that professionals in the northeast of my country were as good as those in Italy. People highly qualified and with good knowledge of diagnostics or technological therapeutics. Here, physicians also held clinical meetings, discussed cases, and conducted research. But the biggest drawback I noticed was the shortfall in resources. Our hospital had an EEG, but in a room not totally isolated acoustically, within accurate analysis software, and with a more precarious apparatus. Neurosurgeons also knew how to deploy DBS with excellence, but had no resources to do it in a constant manner for public health system. Lumbar puncture is also performed,
but in cases where the patient had a deviation or unusual formation of column and maybe would need to use CT scan it was unavailable or had long queues on public service. The lack of electronic medical records and computerization of medical information is something that, in my perception, hinders national research. The work of researchers without an affordable and available big data becomes much more arduous. This article is an analysis of the Brazilian and Italian technological reality in public health system. Health tech is essential and aids researchers with tsunamis of information. Whether in a developed or developing country scenario the digital era has brought us great bonuses and challenges. The opportunity to catch a glimpse of it, provided by this exchange, was unique and should be part of the curriculum of all medical schools. The scientific exchange was just one of the points that made this experience enriching, going beyond expectations and offering a new interpersonal and cultural vision.


**SCORE as a Tool for Change in Health Indicators**

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Research is known from the beginning of time as a tool to fulfill the gaps created by questioning and doubts by the human race. It is a way to help, but also to be helped with, it is constantly reshaped, improved and enhanced. From time to time, more deeply we study subjects and issues, more answers become available, but mainly more complex we discover the process are and more curious we become.

Currently, most of the scientific production still comes from the northern part of the world, Europe, Asia and North America. This scenario has suffered some changes with globalization process which has made information more available and easier to get, process that impacts directly in health indicators and quality of life in different sectors. If Public Health can be as an example of these processes, the graphic below shows how scientific production has grown and
modified its patterns throughout the last few years around the globe.

After seeing this improvement in scientific production and new research projects' release, the impact made by them can be inferred from the health indicators published by the World Health Organization in 2015, on the World Health Statistics 2015. In this table below, the increase of life expectancy and the decrease of mortality can be observed:

The International Federation of Medical Students Association (IFMSA) through Standing Committee on Research Exchange (SCORE) has an important role in the future indicators. Exchanges in research have the capacity to arouse interest and put medical students in contact with the research, something of extreme necessity, since many medical schools do not yet. They can foster the creation of research projects that act locally, and through the results obtained create strategies that will modify the health indicators of that region. They contribute positively to building a diverse curriculum and learning process. They impact on the academic quality of medical training, forming doctors more attentive to the health needs of each population. SCORE can provide students with cross-country mobility, different epidemiological views, and different ways to research, promote health and health education, better diagnostics, and more effective treatments. Cultural diversity is a strong ally in the creation of new strategies, different visions converging towards a common good are capable of creating important changes.

Thus, SCORE generates great opportunities for changes through research, contributing to local scientific creation, which can serve as a starting point for larger work. The research can also provide ideas for activities aimed at improving local health indicators. Small local modifications, when seen more broadly, impact regional and national indicators and thus little by little change the reality of populations.

References:


The SCORPion
Welcome Message from the SCORP Director

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Dearest SCORPions,

If you were to ask me, “when was the first time you stood up for human rights?”, I would tell you the first time I picked up my pen to start writing about the society I live in when I was 12 years old. For me advocacy, even before I knew such word existed, was about sharing a message in a way that people would be willing to take so that they could be a part of the change. With this mindset I spent my years, learning, in order to create. Everything I created, I don't know whether they made any difference to this world or not; but they sure did one thing, they brought me to where I am today.

Where I am today, meaning the place I get to be the person who introduces the new influencers of human rights and their amazing creations, and this is the highest honor I can have.

In this section you will see the work of our members, their opinions, their projects, their perspective, and most importantly their message which you are ought to hear.

We live in a world today in which we have made great advancements regarding human rights but maybe due to this same reason a world where human rights are great risk. We are at a point where it is very easy to forget how newly gained the rights we have are and that inequalities are still great, we are at a point where one has a lot of platforms to spread a message and the speed of misinformation is the same as the speed of information, if not higher. The problem is, the people who wish to spread false messages or the people who want to deny the reality have an upperhand: they don't care, whereas we do because we must. This makes the messages have even more valuable and even more important to share. The messages we have are the lighthouses in the darkest oceans, they are the firefighters in the wildest fires, and they are the only hope we can have and give.

I really hope through reading these articles, you will truly feel what I expressed above. I hope you will see how impact is made, understand the struggles of the people who are away from you, and see the world through another SCORPions’ perspective. I don't wish you keep you any longer, as you get enough exposure of my personal history and philosophical musings in this short introduction, I now set you free so you can continue your journey.

Enjoy to the fullest, get inspired and mobilised, inspire and mobilise,
Integration: The importance of inserting medical students in the community from the beginning of the course to make them more engaged and humanized

Alice Tabita Lemes Fernandes da Silva, Angela Theresa Zuffo Yabrude, Christine Bouwman, Larissa Morastoni Höhn, Sofia Schmitt Schlindwein
IFMSA-Brazil

Approbation in the selective process to enter college. Finally, the dream of becoming a doctor will come true. Lots of emotions and expectations are involved. These situations concern to the reality of freshmen of medicine, a competitive and romanticized course. So many young academics enter in university very motivated, however, they end up losing their humanized side because of the adversities that appear over the course. This occurs so many times, as stated in several testimonials from other colleagues, just because the students look at themselves so unrelated with the community they will act. However, building bonds with the next one is essential for the academic training of a physician aware of their social role. Empathy consists in the capacity of the individual put themselves in the other’s situation. Such feeling is fundamental for medical academics, since it optimizes the contact and the approach with the patient. In addition, interaction with other people is part of the medical student’s daily life, so by listening and contacting others, they can learn a lot and improve teamwork skills. The IFMSA Brazil FURB, by stimulating donations from the future doctors, as well as visits to social care centers since the beginning of college, aims to build empathy and humanized care. In addition, donations of clothes, school material and blood, along with the action at Abrigo Municipal de Blumenau (AMBLU), allowed freshmen to have contact with other members of the class and with the community in general. The solidarity reception lasted for two weeks. The proposal for the host was a gymkhana with the following tests: Donation of blood, clothes and school material, with respective score according to the items specified in the edict. In addition, a visit to AMBLU happened to provide contact between young academics and homeless. This moment had a dynamic, in which the freshman took to the resident of the shelter three cards.

The first card was green and if chosen would invite the resident to tell something good that happened in his or her life. The second one was yellow and would be intended for possible doubts and the third one was red and means some difficulty or a negative fact that the person in situation of street lived. Subsequently, the game rules were reversed, allowing the residents to bring the cards to the academics. This experience provided them the opportunity to talk about lots of topics, as well as expressing...
“Fight. You will overcome the problems and heal a lot of people”, demonstrating the contentment of the homeless with conversations and dynamics realized by the freshmen. The gymkhana made possible the approach of the academics with the community, helping in the formation of future humanized doctors. In addition, the dynamics also underscored the importance of working together and the necessity of empathy in the academic environment.

After the series of activities carried out with the new medical students, it was noted that each activity had a different acquired learning, and after all, these students learned the strength of empathy and the importance of bringing this virtue throughout the medical career. The IFMSA Brazil FURB realizes the importance of acquiring these concepts at the beginning of the college. This helps to develop more humane professionals and aware of the reality in which they live. In addition, these skills learned will contribute to transform the colleagues into a more united group, until they will follow together the long trajectory that is college.

References:

THE BLACKENED WHITE COAT: Ethics in Medicine

Sahiba Maniar
MSAI India

Science is the mother of all curiosity. Synonymous of progress, whether science remains a boon or bane often remains one of the most debatable topics. The progress which often succours humanity neglects the way scientific power has outrun our spiritual power.

The world is constantly developing. And once you jump into the ocean of research, with the addiction to success the shores of ethics is left far behind.

Not so long ago, doctors were bestowed upon a beatific status. However the current situation is harrowing. Sensational stories of organ theft, medical negligence, unnecessary tests, cut practices, animal testing not only ring the bell of unethical practices but expose the hollowness we are a part of. In today’s world, Commercialisation has pinned down the principles of ethics and some doctors often lack the faintest scintilla of empathy.

The white coated corruption has burnt the profession to ashes attracting hope and help with hostility, faith and relief with fear. Medical professionals in recent times have been infamously known to misuse their proximity to power in such a way that the splatters of blood and tears from the patient are caused by the healer himself.

What is the solution the world asks. The solution is simple if it’s intrinsic. The solution is nothing if it’s not. It’s a tricycle with the individual as the driving wheel, and the society and government providing support from the back leading to a beautiful world of cure, humanity and respect.

Today fingers are raising on the fraternity. What’s the solution here we ask with agitation, helplessness and earnest desire to make a change. First and most importantly- Acceptance. It is important to call a spade a spade. Only then can you dig the sand to make a castle. Secondly, an honest and determined desire to make a change. Encourage positive work ethics and slit the veins of corrupt butchers of healthcare. Thirdly inculcate and instil patient rights in every one around us. As Harvey says, “It takes no compromise to give people their rights.”
I believe a society reflects the action of an individual. It is essential to introduce the concept of Human Rights, instil the importance of humanity, awaken a feeling of equality and nondiscrimination and reinforce the idea that “You can be rich by being right.” The society needs a wipeout. The society needs to change. The society needs to adapt as a whole.

I insist the government must enforce extremely stringent laws to punish the guilty. The fear should be great enough to do no wrong. The transparency of the judiciary and bureaucracy should be maintained.

It is extremely essential to include bioethics as an important part of the curriculum. A doctor needs to be reminded the essence of his white coat is much greater than the power he wishes to abuse. He has the power to cure and care. He has the power to change and save lives.

Organisations like IFMSA and WHO, through their tireless activities unfold the unheard stories behind closed doors and give us an opportunity to think, feel and act for those who have no voice. I believe this is where an individual “becomes the change he wishes to see”. They become a part of this cycle of morals, ethics and principles and I believe there is no greater solution than this.

I belong to a fraternity that has buried the purpose of this profession. However every morning like every medical practitioner, with an intrinsic desire to save lives I reignite my passion, rekindle every hope and remind myself as to why I started. As I wear my white coat I represent a community which stands strong in every part of the world striving day and night to make every heartbeat. With a prayer in my heart and tear in my eye, I wait for a day this mobocracy back pedals it’s ugly head for a better tomorrow for the world as a whole.

As a medical student I have definitely jumped in the ocean of welfare towards mankind. However I’m a swimmer fast enough to reach the shore of ethics before I succumb to the pressure of ill hated mankind.

Gender equality in medicine: Do we all have the same opportunities in healthcare?

Katherine Candelario, Lilian Teresa Pimentel González
ODEM Dominican Republic

“No country can truly flourish if it stifles the potential of its women and deprives itself of the contributions of half its citizens”
-Michelle Obama

Women have had to fight for a seat at the table, scaling society and breaking boundaries in unspeakable ways to create a more gender-equal environments. Throughout history, women have been viewed as ‘less than’ or ‘not as capable’ in different areas of life and work. The field of science is no exception to this belief.

Over time, the transcendence of the female has been an uphill battle. Only time will tell where and when we will begin to completely merit men and women equally for their positions in society. Gender disparity constitutes a barrier when specializing in a given branch of medicine. In many specialties, males outnumber females; only a few specialties have an equal split. In 2014, one study reported gender differences among certain medical specialties. Between 2006 and 2008, 49% of the 48,235 graduates from US
medical schools were female (1). In numerous surgical specialties, such as neurosurgery, orthopaedic surgery, otolaryngology, and 47% and 74%, respectively.

Interestingly, even in pediatrics, where women represented approximately 50% of staff, the proportion of women in leadership positions was only 15% (1). A second study highlighted that female physicians constituted half of the permanent clinical positions in a Spanish hospital, and that hierarchical promotion was significantly lower than that of men (2). Notably, authors emphasized that strategies to tackle gender inequality must arise from within the institution.

Traditionally, certain specialties have been viewed to be male dominated, while others have been observed as more female friendly. Hence, women who select these male-dominated specialties, such as orthopedic surgery, tend to be a source of mockery. These women tend to be viewed as not feminine and overbearing. Similarly, men who enter obstetrics tend to be viewed as less by their male companions in fellow specialties. Again, these stigmas only add to the pressing issue of inequality, indirectly stating that one sex cannot perform the job of the other sex. Also, many female physicians may be called by their first name or ‘miss’ (3). Although this salutation may be viewed as unintentional and trivial, women do notice this salutation and it can negatively impact their performance and satisfaction with her career. Ultimately, it may add to the underlying connotation that men and women are not equal.

For years, Dominican women were seen as caregivers, while men were considered financial supporters of the household (4). Women have been excluded from certain employment positions and professions because of the macho culture of the country. Nonetheless, recent female figures have engaged in traditional male positions such as bus drivers, paramedics, lawyers, and politicians. However, solid gender-based standards of what is socially adequate still permits gender inequalities among job opportunities. As female medical students, we get often confused as nurses, a profession that contributes significantly to healthcare service delivery. However, since we are receiving medical training, we simply prefer to be addressed by the title that are pursuing. Still to date, we are frequently recommended to select a more lifestyle-friendly specialty in order to prioritize our future families and households.

As medical students, we can break this cycle of stigma and gender inequality by simply being aware and making choices that benefit genders equally. The truth is that both genders hold power within themselves and can establish better practices in an evenly distributed and less stigmatized healthcare field. New opinions, options, and ideas from both perspectives are beneficial when considering important aspects of patient care. For example, we can create environments that supplement the growth and empowerment of both genders from early career training by fostering mentorship programs, sponsorships, and active recruitment of both genders in all areas of medicine. After all, medicine is a team-oriented career, and without players from both sides of the field, we will never win the match.

References
Esperanza Project: multidisciplinary assistance to indigenous Venezuelan immigrants in Northern Brazil

IFMSA-Brazil

Venezuela is experiencing a serious socioeconomic crisis and, in this sense, thousands of people are forced to leave the country in search of better health conditions. It is estimated that about 100,000 Venezuelans have fled to Brazil in recent years, through the state of Roraima, bordering Venezuela. Currently, most of these immigrants are living in cities in the Northern Region of Brazil, such as Belém. It is noted that these migrants are in poor health conditions, exposed to severe malnutrition and infectious diseases such as measles, malaria, tuberculosis and HIV. [1]

Indeed, the health needs of migrants and refugees require special attention because of their socioeconomic vulnerability and for this reason it is essential to reduce communication and language barriers to promote more accessible health care. [2] Consequently, it is worth mentioning that a large number of these Venezuelan refugees in Brazil are indigenous, mainly of the Warao ethnic group, who have several difficulties of access to health. [3] In face of this, the Esperanza project was conceived to facilitate the access of these indigenous to the Brazilian Unified Health System, in accordance with the principle of universality present in the guidelines of this system. [4]

Therefore, the objective of the project was to promote social empowerment and health care for these migrants in the city of Belém in the State of Pará through general medical care and health education, such as oral hygiene, food handling and sexual health for children and adults.

PROJECT REPORT

It was performed in the International Federation of Medical Students’ Association of Brazil (IFMSA Brazil), through its existing local committee at Centro Universitario do Estado do Para (CESUPA) that has developed the “Esperanza” to cover the main needs of indigenous Venezuelan immigrants of Warao ethnic group. The development of the project also involved a partnership with other local committees of IFMSA Brazil: Universidade Federal do Para (UFPA), Universidade do Estado do Para (UEPA)
The project happened during 4 different moments during the first semester of 2019 and the activities were divided into days of distribution of non-perishable foods, clothing and hygiene kits collected, as well as guidance on oral health, food handling and sexual health. Moreover, medical care was provided by volunteer medical students accompanied by professionals. The Project had partnership of laboratories that allowed doctors to request routine tests. Adding to it, the Project had other partnerships that included imaging exams for pregnant women and the distribution of medication for free. At the end of the semester, 157 medical consultations took place among children and the elderly, which included the participation of about 100 volunteers: medical student, dentistry, pharmacy and law, as well as doctors, pharmacists, and dentists.

RESULTS
The approach of the refugee’s situation in form of a project has brought an essential improvement regards to training the capacity of the health professionals involved and has positively reflected into their valuation of the humanization involved in this process, contributing to a future prepared and empathic professional for both regional, national and international demands. Moreover, it is understood that the lack of knowledge of these immigrants about their rights in a foreign territory and the linguistic barrier are fundamental factors that interfere in their access to the health system, such as the neglect of the continuity of treatment in health facilities. In this context, there was an initial difficulty in attending and establishing contact with the indigenous people of the Warao ethnic group. To overcome this, academics developed alternative methods of communication, such as mimicry and the creation of a mini dictionary Portuguese – Spanish – Warao with the main words of medical care, such as pain, diarrhea and vomiting. Beyond that, occurred the development of an accessible medication prescription chart that had figures that instructed the correct way for them to take their medicines, in what time of the day and the amount of medication they had to take. As a result, with the Esperanza Project, academics have had a great learning about how to conduct affordable medical assistance for this specific health demand.

CONCLUSION
The Esperanza Project was of great importance both for the improvement of the health status of the indigenous Venezuelan migrants of Warao ethnic group and for the medical students to develop their care skills. Therefore, the participation and creation of activities like this should be encouraged as a role model and increasingly widespread among medical schools around the world.

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According to Article 1º of the Human Rights Order, all human beings are born free and equal in dignity and rights. In this perspective, it is essential to emphasize the importance of the inclusion of disabled people in the most varied spheres of the State, especially in the health sector. It is evident that people with physical disabilities need general care, just like any other patient, and specific care that varies according to their needs (physical therapy, psychology, speech therapy, among others). However, the limited knowledge and understanding of disability among healthcare providers often prevents timely and effective coordination of health care services, sometimes leading to inadequate examinations and uncomfortable and unsafe experiences for people with disabilities (1). In addition, the history of stigmatization, discrimination and inequalities experienced by adults, adolescents and children with disability deny their autonomy (2).

In light of these problems, in order to establish an adequate behaviour of health professionals to deal with the limitations of disability people, it is urgent that, even in universities, there should be a correct preparation of students for the proper development of the relations with individuals with these specificities (3). Therefore, it is imperative that future professionals develop the understanding and respect for the limitations of this population, the feeling of empathy and the ability to lead this patient in view of their psychological and social difficulties. So, seeking to meet these needs, it was proposed to carry out the campaign “Difficulties of physical disabilities - Only knows who has them.”

The campaign took place in two moments. On 07/05/2019 a dynamic awareness activity was developed, and on 08/05/2019 we held a conversation with three health professionals, like a “talk wheel”. The objectives of the project were to raise awareness of the daily difficulties faced by people with disabilities and to enable participants to learn about the appropriate management of this population. For the accomplishment of the dynamics, a stand was set up in the courtyard of Christus University Center Ecological Park where SCORP
and welcoming students who were present for the participation of two simulations. In one of the activities, participants were challenged to open two locks amid a series of keys. However, they should do it blindfolded. In the other activity, individuals should fetch a tray that contained other objects on a table and lead to another table without knocking them over. Nevertheless, this challenge should be fulfilled sitting in a wheelchair, passing a path bounded by obstacles. The purpose of this activity was to highlight the difficulties that are faced daily by the physically disabled. Simple, everyday, banal activities for most people are often a great challenge for some people with limitations. This action allowed many students to understand for themselves the importance of this issue. After participating in the dynamics, the LORPs made a brief awareness speech, broadening the vision of our activity to reality. In addition, they took advantage of the moment to spread the talk wheel.

The lecture was attended by three health professionals, the doctor Socrates Belém, who spoke on “How to give the bad news of a permanent disability for patients and their families,” the physiotherapist Andréa Braide, who addressed the theme “How to do the continuous follow-up of participants with permanent disabilities “and the psychologist Selênia Paiva who spoke on” The psychological and social difficulties of a disabled patient “. In addition, we had the presence of Regiane Athayde (Gigi Athayde) a patient with paraparesis who reported her experiences and difficulties. In this second moment of the campaign we counted on the presence of 21 subscribers who told us that they liked the event a lot. Here are some reports from the participants: “I loved the didactics and how the theme was approached … I had never thought about these difficulties that the disabled suffer.” “I really enjoyed this talk, especially the dynamics … congratulations.” “You are a cute team. Congratulations!”. In addition to the compliments of the participants we have the input from the organizers and the speakers who really enjoyed the experience.

The campaign “Difficulties of Physical Disabilities: only knows who has them” can be considered a success, because it reached its goals. Such a project was extremely enriching to those involved and can be seen and used as an example for future activities of the local committee.

A call to End the World’s Worst Humanitarian Crisis

Ahmed Sadeq Omar Maknoon  
NAMS-Yemen

While the world is talking about the effects of technological advancement on the improvement of health and the quality of lifestyle, Yemen a country that is torn by war is living one of the worst humanitarian crisis in the world. Yemen is facing a massive resurgence of cholera in what was already one of the world's worst outbreaks, with more than 137,000 suspected cases and almost 300 deaths reported in the first three months of this year. The spread of the waterborne disease has been exacerbated by the collapse of Yemen’s health system, in a country where 17.8 million people lack access to safe water and sanitation services. Immunization coverage has stagnated at the national level with declines seen in many areas resulting in outbreaks of measles, diphtheria and other vaccine preventable disease. Access to primary healthcare for mothers, their newborns and children remains an issue. Around 50% of hospitals and health facilities in Yemen are either not working or functioning partially. People in many areas have to travel long distances in order to access basic health care. 20.2 million (about 76 percent of the total population) would be facing life-threatening shortages of food without the assistance provided by the humanitarian community this could push the country to the brink of famine.

Conflict has led to internal displacement of 3.6 million people, including 2 million children, left millions of public sector workers without salaries for years and undermined humanitarian access to many vulnerable populations. An estimated 12 million Yemenis, including 7 million children, will depend on food assistance in 2019. According to the Country Task Force on Monitoring and Reporting on grave child rights violations, more than 6,700 children have been verified as killed or maimed since the start of the conflict and more than 2,700 boys have been recruited into armed forces and groups. The damage and closure of schools and hospitals are threatening children's access to education and health services, rendering them vulnerable to serious protection concerns. At least 2 million children in Yemen are out of school. A United Nations report in early 2019 concluded: “Yemen now risks losing its youngest generation to a vicious cycle of violence, displacement, poverty and illiteracy.”

At the middle of this dark climate of misery medical student with other governmental and non-governmental organizations worked like candles of light through the past years taking over the responsibility toward their communities all over the country. For example, medical student have continually participated in campaigns to raise awareness on endemic disease like cholera, dengue and malaria. They have also participated in hundreds of workshops that targeted the general public on first aid and emergency management and are still working in several projects that tries to address some of the urgent needs of the community.

In 2017 The IFMSA with the support of NAMS-Yemen had a press release on the deterioration of the humanitarian situation in Yemen. The press release spoke of deterioration of the humanitarian situation in Yemen, due to the blockade of the country's borders at that time and the situation is only getting worse. It had a call on all involved actors and that call is as valid as it was in the past. To:

-respect, adhere and act in accordance to International Humanitarian Law (IHL), relevant regional and national treaties and adhere to the principles outlined in the United Nations charter;

-Do not prohibit, obstruct, delay, paralyze or by any means prevent the medical and
- humanitarian aid to reach people in need;
- Ensure access to basic services including food, water, healthcare and adequate shelter, and facilitate access for impartial humanitarian assistance;
- Take all measures to protect civilians and prevent genocide, war crimes, ethnic cleansing, crimes against humanity and other man-made disasters.

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All human activity has an ethical background. There’s a social force that affects each individual action, similar to the force of gravity that it’s impossible to escape from. Good and evil are two opposite poles within whose polarizations develops human behavior and ethics. But, what’s the purpose of ethics? Essentially, the common good. But the interpretation of what is good for each and every human being is in constant change and even controversy.

Health is the most precious asset of the individual. For physicians, who have vowed to preserve life at all costs, for whom the Deontological Code issues the moral standards that are required to meet by each doctor; life is priority in daily practice. But medical practice confronts professionals to ethical dilemmas; many conflicting decisions force physicians to choose a path that respects the patient’s hopes and wishes, searching for the best for a patient’s health.

Ethical issues are continuously presented in medical practice, especially in diagnosis and therapeutic technological advances. Technology in the medical practice has been an amazing benefit for health care, mainly in diagnostic and treatment methods. However, as these changes became progressively fast and overwhelming, new dilemmas began to emerge that challenged several of the ethical principles of medical profession and influenced its practice.

Many ethical aspects surround technology usage in medical practice: is the use of a new technology justified according to its price, quality and efficiency? Is there sufficiently trained staff for its proper use? Does the new technique overcome those that are already in use and have economic advantages? Is the patient’s quality of life improved? Can it be used by the general population or will it be reserved for a privileged few?

The German philosopher Hans Jonas stated: “...technology is an exercise of human power, that is, a form of action, and all human actions are answerable to moral scrutiny.” This concept let us reflect on the use of technology on medical practice; to evaluate if the contemporary practice of medicine is respecting the ethical principles that govern medical practice and if it is aware of the power of technology.

These reflections open the door to elucidate why physicians have been slipping more and more towards science, in deterioration of the art that is the side of medical practice that embraces humanism and allows physicians to come closer as human beings to another human being. The inclination of medicine towards scientific and technological aspect represents a risk of leaving aside the altruism, own and essential attitude of the medical practice, that without doubt must be the base of the actions that leads physicians in the patient approach.

Hence, ethics education in the medical field must be oriented to produce physicians who know how to use technology discriminately. The appropriate clinical knowledge, intuition and other attributes, together with help, understanding, empathy, supported by listening and speaking with patients, lead physicians to understand them. That is the language of the science and the art of medicine.

References
**Fight like a girl: from childhood to old age. An eternal struggle against sexual violence.**

Luíza Merigo Santa Rosa, Ana Carolina Avelar, Jamille Nunes Coelho Fialho Dias, Thalita Stein. IFMSA-Brazil

According to the Maria da Penha Law, actions capable of causing death, physical, psychological, moral and patrimonial damages, or sexual act without consent is violence. Every 11 minutes, a woman is raped in Brazil, per day, totaling approximately 130 victims. Based on the complaints, the victims are women aged 15 to 49, however, it is known that vulnerable populations, such as children and the elderly, are also abused but are hardly reported. According to Ipea's studies, based on data from 2011, the Ministry of Health's reporting information system (SINAN), these groups are believed to account for more than 70% of total abuses. In the state of São Paulo alone, in 2013, 602 cases of violence against the elderly were recorded - half of a sexual nature. Of these, 40.2% of victims are between 60 and 64 years old, 36.7% are over 70 years old. About the world's children, the UN estimates that 225 million children are abused annually and 150 million are women.

Faced with this sad scenario experienced by women, the proposal to “fight like a girl” shows the forms of violence and the rights of women as citizens. In medicine, we seek to improve techniques for the detection of victims of sexual violence - especially the vulnerable (children and the elderly). How the health professional should address psychological issues, reducing the trauma and proceeding with the cases that victims seek for a care.

Coordinating this event was incredible. From the first idea, to finding the guest speaker, executing the signatures and the great progress of the lectures on the day of the event was satisfactory. And even more with the good feedback from students from health and human areas, from public and private institutions. We believe that the brotherhood among the female population was stimulating for the participation of the public, mostly female. We use Instagram, Whatsapp and Facebook for disclosure; Achieving 186 subscriptions. The lectures were rich and broke stigmas imposed on the victims, addressed the physical and psychological issues that are in the woman's life. Historian Dr. Tânia Maria Gomes da Silva spoke about the types of violence and why they happen (the idea that women are the “fragile sex” since they are born and then violence is legitimized). Psychologist Leticia spoke about psychological care for abused women. We had pediatrician Jane Laner talking about child abuse and nurse practitioner Dr. Karina on violence against older women - she is showing signs of identification and how to act in such cases.

When analyzing the questionnaire, we noticed the positive impact, due to the suggestions and criticisms for future editions of the event. Wider approaches to violence types were recommended to explain more cases and situations, as well as to create materials to guide practitioners in such cases.

Among the participants, 79.4% would know how to proceed if a victim of violence arrived to attend. In contrast, 20.6% would not know how to do it. In addition, in the domain of the subjects, a derisory part already dominated the subjects discussed. While 59.7% supplemented previous knowledge; and 37.3% of the participants never discussed it in college. To evaluate the lectures, we asked which ones were most useful, either by theme, didactics or personal impact - more than one alternative could be pointed out. Thus, 55% of the participants stated that the psychologist’s speech was more productive, while the lectures of the nurse and doctor in history followed in second place with 35.3%. The speech of the pediatrician reached 32.4%. Finally, the questionnaire addressed which signs could identify the victims and most of them may include behavioral changes, physical marks,
fear, restlessness, isolation, insecurity, shame, sadness and even malnutrition and lack of hygiene are signs that should be observed and investigated with caution in these vulnerable populations.

We note the need to address this issue at the university whether it is for public awareness of the importance of respecting women, or how they can help victims “escape” from it. In addition, participants' satisfaction with the interlocutors demonstrates their interest in this unexplored topic in the university (data verified that 95% of the students did not have an adequate discussion on the subject and 20.6% did not have conviction about how to participate in the victims). Thus, with small local actions, we hope to reduce or eradicate these adverse conditions for women; giving them due social importance.

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medical students worldwide